



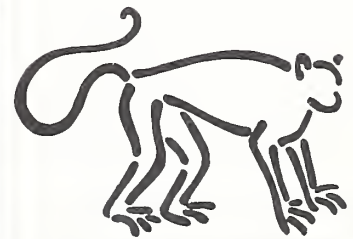
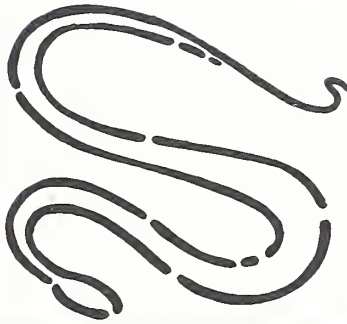
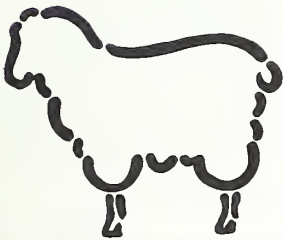
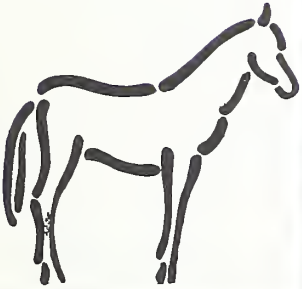
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58

International Directory of Animal Health and Disease Data Banks



Historic, archived document

Do not assume content reflects current
scientific knowledge, policies, or practices.

This directory was compiled by Herner and Company for the National Agricultural Library under Purchase Orders 40-32R6-7-2577, 43-32R7-9-2145, and 43-32R7-9-2141. Work was conducted under the direction of Jesse Ostroff, Technical Liaison Officer for Animal Science and Industry, National Agricultural Library.

INTERNATIONAL DIRECTORY OF ANIMAL HEALTH AND DISEASE DATA BANKS

National Agricultural Library
United States Department of Agriculture

PREFACE

Background

The initial impulse to compile an international directory of animal health and disease data banks arose during the search by the staff of the Veterinary Services Branch of the Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture (USDA) for more inclusive access to data dealing with the incidence, prevalence and nature of epizootics drawn from the entire spectrum of scientific and professional communities engaged in research, clinical practice, regulation and control of animal disease. After this search was initiated, it was soon realized that such an effort reflected a worldwide quest for obtaining data needed

- to produce quantum increases in the quantity and quality of food, clothing and industrial by-products of animal origin,
- for improving the effectiveness in reducing the spread of disease between animals and man (along with its ancillary contribution in improving the quality of the environment), and
- for means of advancing the humane treatment of non-food companion and laboratory animals.

This worldwide interest in the availability of animal health data was frequently expressed by those institutions and individuals who themselves are collecting, generating and disseminating data on animal morbidity/mortality and the physiological and biochemical changes that accompany animal maladies. One of the principal objectives in compiling this directory is to provide the data needed to assist decision makers in assigning financial and manpower priorities to their programs for combatting animal diseases and pests.

The search for these data banks induced those in APHIS engaged in leading and coordinating the U.S. national effort for preventing or controlling animal diseases of economic significance and those responsible for gathering, storing and disseminating information from the published records in the National Agricultural Library (NAL) to join forces in organizing the International Symposium on Animal Health and Disease Data Banks, held in Washington, D.C., December 4-6, 1978.* At this symposium, held to share experiences on operational techniques and to promote the coordination of complementary data gathering activities, it was first announced that a survey was to be initiated to identify data bases throughout the world, a questionnaire designed to collect information about each eligible responding data bank, and the results of this effort published in a directory. This compilation was intended to cover representative sources of data pertinent to the needs of those engaged in preventing and controlling diseases of all non-human vertebrates, especially livestock and companion animals.

Definition

To determine the types of data required to reach this objective, it would be useful to precisely define "animal health and disease data" in terms of the major information parameters and limitations in subject

*International Symposium on Animal Health and Disease Data Banks (1978: Washington, D.C.). *Proceedings*. Washington, D.C.: U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services; Science and Education Administration, Technical Information Systems, 1979. (Miscellaneous Publication Number 1381)

coverage. The types of data being considered fall into four categories according to which this directory is organized: bibliographic, epidemiologic, laboratory and clinical, and research-in-progress. In the process of defining the phrase, "animal health and disease data," both the substantive meaning of the phrase and the criteria for including or excluding the subjects covered in this work should be delineated. An ancillary concern is the necessity to identify banks of *data* as distinguished from sources of information derived from analysis. The latter is used by consumers of data, and does not constitute a data bank itself. In brief, data as they relate to the contents of this directory are objective entities; whereas information, intelligence or analyses deal with products resulting from human thought in which data are used as the raw material for solving complex problems requiring judgment based upon proven principles. This directory confines its coverage to listing sources of information providing data rather than products of analysis utilizing data. An example of the latter would be the services or products of consulting firms engaged in problem solving. However, the caveat should not be considered to exclude the data gathering efforts of organizations that do both, *i.e.*, gather and organize data as well as analyze this factual raw material for application. This directory includes listings of only the data gathering and compiling products and services. Accordingly, the following definition of animal health and disease data has been used as a conceptual framework and operational guideline in compiling this publication:

Animal health and disease data includes types of basic information dealing with or leading to proven-by-experience facts or quantities required for analyzing and dealing with the impairment of the normal state of living animals by infectious, noninfectious, physical and chemical agents exerting adverse effects on those functions required to maintain normal life and safe-to-human production of food and non-food animal products.

To amplify this definition from the point of view of subject and discipline, the coverage of this directory includes data dealing not only with animal diseases *per se* but also with preventive veterinary medicine (including diet therapy) as well as those public health concerns aimed at preventing, controlling or eradicating animal diseases, including the pest and parasite vectors and reservoirs transmitting and harboring these afflictions. Prominent in this last-named area—*i.e.*, public health—are data emanating from meat and poultry inspection experience, both ante- and post-mortem, including toxic chemical residues in meat.

A number of subjects and interest areas are covered in this work that do not deal directly with epizootiology but affect animals so vitally and ubiquitously that their omission would constitute a serious lack of data needed by the prospective users of this directory. For example, data regarding the environment (housing, weather, and terrain conditions) and animal feed as they relate to disease and impairment must be considered. However, in this peripheral area, boundaries of coverage have been observed so that data pertinent solely to animal production but not disease are excluded.

Observations

From the results of our search for candidate entries and responses to our questionnaire, the following generalizations present themselves:

- In the important area of epidemiological surveillance of animal disease data, the differences between the various national surveillance systems reveal that the United States lacks as complete a national program for collecting and analyzing incidence and prevalence of economically and zoonotically important diseases as exist in many other countries. This reflects the legal status of animal disease reporting within each country, as well as their relative sizes.
- The diversity of sources that were found to be pertinent was even greater than anticipated. These sources are drawn from the multifold and various disciplines within the biological

sciences and technology. For example, research employing laboratory animals constitutes a mine of animal health and disease data requiring ingenuity and persistence to identify and exploit.

- It is hoped that users of this directory will realize that sharing data is a form of communication equally important as exchanging research findings through the literature.

Acknowledgments

The help provided by Dr. E. I. Pilchard, Emergency Programs, Veterinary Service, APHIS, USDA, in furnishing the initial impetus not only for producing this directory but also for being most instrumental in organizing the International Symposium should be recognized and acknowledged. We wish to thank the Foreign Agricultural Service, FAS, USDA, for identifying and contacting foreign sources. Also, special thanks are due Wallace Olsen, NAL, for his assistance in negotiating the collaboration of Herner and Company who organized the data, prepared the manuscript, and established an automated ongoing record of relevant data banks which will be stored, maintained, updated, and employed at NAL. The work of Herner and Company was essential to the completion of this work, and the encouragement and guidance of Saul Herner in completing this directory deserve special mention. Last, but not least, I wish to express my most heartfelt gratitude to Nancy Wright of Herner and Company who managed the actual production of this directory and without whom this work would never have seen the light of day.

JESSE OSTROFF, Technical Liaison Officer
for Animal Science and Industry
National Agricultural Library

November 1982

CONTENTS

Preface	i
Introduction	1
Bibliographic Data Banks	3
France	
CANCERNET	3
Italy	
International Information System for the Agricultural Sciences and Technology	3
Istituto di Malattie Infettive, Profilassi e Polizia Veterinaria	4
Netherlands	
Excerpta Medica	5
Peru	
Proyecto Especial Utilizacion Racional de la Vicuna	5
Portugal	
Divisao de Documentacao e Informacao Cientifica e Tecnica	6
Servicos de Documentacao e Informacao da Junta Nacional dos Produtos	
Pecuarios	6
United Kingdom	
Dairy Science Abstracts	7
Helminthological Abstracts, Series A – Human and Animal Helminthology	8
Index Veterinarius	9
IRL Life Sciences Collection	9
Protozoological Abstracts	10
Review of Applied Entomology, Series B (Medical and Veterinary)	11
VETDOC	12
Veterinary Bulletin	12
United States	
Agricultural On-Line Access	13
Animal Information File	14
Aquascience Research Group: Drugs and Chemicals Used in Fish Medicine	15
BioSciences Information Service	16

Bibliographic Data Banks

United States (continued)

Chemical Abstracts	17
Defense Pest Management Information Analysis Center	18
Emergency Programs Information Center Data Bank	18
Environmental Mutagen Information Center	19
Environmental Teratology Information Center	20
Fish Doctor Clinical Center, Inc.	20
Hierarchical Environmental Retrieval for Management and Networking: Wildlife Data Files	21
National Technical Information Service	22
Predator Data Base	23
Primate Information Center	23
Registry of Toxic Effects of Chemical Substances Online	24
Rose Lake Pathology Laboratory	25
Science Citation Index	25
Toxicology Data Bank	26
Toxicology Information On-Line	27
Veterinary Reference Service	28

Yugoslavia

Edvard Kardelj's University of Ljubljana. School of Veterinary Science	28
--	----

Epidemiologic Data Banks	30
------------------------------------	----

Australia

Australian National Animal Disease Information System	30
---	----

Brazil

Information System for Vesicular Disease Surveillance	31
---	----

Colombia

Instituto Colombiano Agropecuario. Oficina de Programacion y Evaluacion	31
---	----

Denmark

Danish Veterinary Services	32
--------------------------------------	----

Ecuador

Programa Nacional Salud Animal. Department of Epidemiology	32
--	----

France

Bulletin Epidemiologique Mensuel sur la Rage en France	33
Continuous Eco-Pathological Survey in Supervised Ruminant Herds	33

Epidemiologic Data Banks (continued)

Germany (Federal Republic)

SALVET	34
Virus Data Bank	35

Italy

Animal Health Yearbook	35
------------------------------	----

Korea

Korea Animal Health Division	36
------------------------------------	----

Switzerland

Schweizerische Tollwutzentrale	36
--------------------------------------	----

United Kingdom

Animal Disease Occurrence	37
Dairy Information System	38
Veterinary Investigation Diagnosis Analysis II	39
Zoonoses Order Data	40

United States

Arkansas Animal Morbidity Report	40
Meat and Poultry Inspection Program Reporting System	41
Michigan Animal Health Diagnostic Lab Case Abstracts	42
Minnesota Food Animal Disease Reporting System	42
Mississippi Board of Animal Health and Veterinary Diagnostic Laboratory	43
National Wildlife Health Laboratory	43
Nebraska SPF Swine Accrediting Agency	44
Nevada Animal Disease Laboratory	44
New Mexico Brucellosis Computer Center	45
Oklahoma State-Federal Brucellosis Laboratory	45
Residue Monitoring System	46
Swine T.B. Fax	46
Texas Veterinary Medical Diagnostic Laboratory Statistical Report	47
Vermont Department of Agriculture	47

Laboratory and Clinical Data Banks

Australia

Animal Disease Records System	48
Dairy Herd Health and Management Program	49
Institute of Medical and Veterinary Science	49
LABTESTS – Animal Health Laboratory Recording System	50

Laboratory and Clinical Data Banks (continued)

France

Centre National d'Informations Toxicologiques Veterinaires	51
--	----

Kenya

Veterinary Research Department	51
--	----

New Zealand

Laboratory Management and Disease Surveillance Information System	52
---	----

Norway

Helsekort for Ku	52
----------------------------	----

United Kingdom

Compton System for Recording Events Affecting Economically-Important Livestock	53
---	----

United States

American Veterinary Medical Data Program	54
Animal Pathology Index	55
Animal Toxicology Hotline	56
Clinton Pathology Unit	56
Fish Disease Control Center	56
Fish Pathology Data Bank	57
Florida Bureau of Diagnostic Laboratories, Veterinary Medical System	57
Georgia Veterinary Diagnostic and Investigational Laboratory	58
International Species Inventory System	58
Iowa State-Federal Animal Health Laboratory	59
Laboratory Animal Data Bank	60
Massachusetts Large Animal Diagnostic Laboratory	60
Michigan Animal Disease-Toxic Substance Information System	61
Mississippi Extension Wildlife and Fisheries	61
Montana Veterinary Diagnostic Laboratory	62
New York Diagnostic Laboratory Data Bank	62
New York Fish Disease Control Center	63
New York Zoological Society	63
Oregon Veterinary Diagnostic Laboratory	64
Pennsylvania Bureau of Animal Industry	64
Primate Information Management System	65
Registry of Veterinary Pathology	65
Rutgers Poultry Health Laboratory	66
Tennessee Veterinary Medical Information Science	66
University of Florida Veterinary Clinical Data Retrieval System	67
Utah State Veterinary Diagnostic Laboratory Case File	68

Laboratory and Clinical Data Banks

United States (continued)

Vermont State Diagnostic Lab	68
Wisconsin Central Animal Health Laboratory	69
Zoological Society of San Diego	69

Research-in-Progress Data Banks

France

Index Veterinaire Francais	71
--------------------------------------	----

United Kingdom

International Index of Laboratory Animals	71
National Veterinary Index	72
Nederlandse Veterinaire Index	72

United States

Conference Papers Index	73
Current Research Information System	73
International Cancer Research Data Bank Program	74
New York State Department of Environmental Conservation. Division of Fish and Wildlife	75
Smithsonian Science Information Exchange	76

Subject Index	78
-------------------------	----

Organization and Title Index	85
--	----

INTRODUCTION

The *International Directory of Animal Health and Disease Data Banks* contains descriptions of 113 data banks that responded to a questionnaire mailed in 1980 to more than 500 possible data bank producers throughout the world. The list of candidate data banks was compiled not only from published and automated directories and other secondary information sources, but also from responses to over 1200 letters sent to all sectors of the scientific/professional community, including attendees at the 1978 International Symposium on Animal Health and Disease Data Banks, schools of agriculture and veterinary medicine, government agencies, research institutes, diagnostic laboratories, commercial firms, agricultural associations, non-profit organizations, and libraries throughout the world. These letters solicited suggestions for entries to be included in the directory. Agricultural attaches in U.S. diplomatic missions also contributed the names of possible data bank producers and distributed questionnaires.

It is hoped that this directory will not only assist biomedical researchers and practitioners in locating useful data, but also enable persons and institutions wishing to establish their own data banks to contact similar systems for advice, data exchange, and other cooperative endeavors.

It must be recognized that during the time required to compile and publish this directory, some of the information on data bank size, publication prices, and future plans may have been superseded. The staff of the National Agricultural Library offers assistance in determining the current status of any of the data banks that have ceased to exist, changed affiliation, or altered the nature of their information delivery. The Library wishes to create and maintain a current and comprehensive reference source of animal health and disease data banks. Consequently, the staff would like to be notified of the existence of new or missing data banks, and would also appreciate suggestions for improving the scope and content of the automated file from which this directory was derived. Please contact

Jesse Ostroff, Technical Liaison Officer
for Animal Science and Industry
National Agricultural Library
Beltsville MD 20705
U.S.A.

How to Use this Publication

The directory is arranged by four major categories of data: Bibliographic Data, Epidemiologic Data, Laboratory and Clinical Data, and Research-in-Progress Data. Cross references at the end of each section refer to multi-type data banks that have been listed under another category. Within each section, data banks are arranged alphabetically by country of origin; and within each country, alphabetically by the name of the data bank. The accession number of each entry was designed to show this arrangement. The first three letters indicate the section, the following two letters indicate the country, and the final three digits indicate the consecutive number of the data bank in the printed volume. For example, BIB-UK-005 is the accession number of a bibliographic data bank operated in the United Kingdom; it is the fifth entry in this publication.

Data banks are indexed with subject descriptors selected from the *Veterinary Multilingual Thesaurus* prepared by the Commission of the European Communities (Munich: K.G. Saur, 1979), supplemented by the *Animal Disease Thesaurus* of the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services (Hyattsville, Md.: U.S. Department of Agriculture, 1981). In addition to the geographic arrangement of the directory entries by country of origin, geographic descriptors are included in the subject index when the contents of a data bank concern a specific location. Data bank names and

acronyms; names of operating, sponsoring, and affiliated organizations; and publication titles are listed in a separate organization/title index.

The contents of data banks are being made available increasingly to the public for direct on-line access through commercial vendors. Vendors specified by data bank producers have been included in each data bank description, although availability is frequently subject to change. The following vendors were most often cited by data bank producers; inclusion of a vendor in the directory does not imply endorsement by the U.S. Department of Agriculture. Contact the vendors for terms and conditions of use.

BRS

Bibliographic Retrieval Services
1200 Route 7
Latham NY 12110
U.S.A.

ESRIN

Via Galileo Galilei
00044 Frascati
Italy

DIALOG

DIALOG Information Services, Inc.
3460 Hillyview Ave.
Palo Alto CA 94304
U.S.A.

MEDLARS

MEDLARS Management Section
National Library of Medicine
National Institutes of Health
U.S. Department of Health and Human Services
Bethesda MD 20209
U.S.A.

DIANE

Euronet DIANE
B.P. 777
Luxembourg

ORBIT

SDC Search Service
System Development Corporation
2500 Colorado Ave.
Santa Monica CA 90406
U.S.A.

DIMDI

Deutsches Institut fuer Medizinische
Dokumentation und Information
Weisshausstr. 27
Postfach 420580
D-5000 Cologne 41
Germany (Federal Republic)

RECON

U.S. Department of Energy
P.O. Box 62
Oak Ridge TN 37830
U.S.A.

IRS/QUEST

Information Retrieval Service
European Space Agency

(Available to agencies of the U.S. government and
USDOE contractors)

BIBLIOGRAPHIC DATA BANKS

France

BIB-FR-001

CANCERNET

Institut Gustave-Roussy
39-53 rue Camille Desmoulins
94800 Villejuif
France

Contact: M. Wolff-Terroine, CANCERNET Director

Telephone: 677-81-09, ext. 734
Telex: 200 349

Mission and Function: CANCERNET was established in 1969 to collect and make accessible the world's cancer-related literature.

Types of Information Available: Worldwide bibliographic data are collected almost entirely from published journals containing epidemiologic, laboratory, clinical, and statistical information in all languages.

Data Elements and File Size: Each stored bibliographic record includes descriptive cataloging data, subject descriptors, category codes, language codes, qualitative codes, and sponsoring agencies or organizations. Some records also contain abstracts. Records are stored in French and English translation. Documents are indexed with keywords from the title or text, free words, and terms from the CANCERNET Thesaurus. Approximately 11 index postings are assigned per document, coded by CANCERNET's own classification. Records are accessible by author and subject. There were 130,000 documents in the data bank as of mid-1980, the earliest of which was dated 1968. Through monthly updates, approximately 15,000 documents are processed each year.

Processing Mode: Both batch and on-line computer processing are used for retrieval. Data are stored on magnetic tape and disc. The data bank employs Univac 1106 and Philips X 1150 hardware, and software developed in-house. The software is available to outside users.

Products and Services: Current and retrospective bibliographies, selective dissemination of information service, on-line access, and statistical analyses of the file are available. Information is delivered in a printed index journal, by computer printouts, or on magnetic tape, and may be obtained by mail, interactive computer terminal, or teletypewriter printout. Regular output is provided monthly. **Availability of Products and Services:** CANCERNET is accessible through several information centers, which determine their own pricing policies. On-line direct access is available for 270 French francs per connect hour, and 0.60 francs per item. Descriptive material is available in French or English.

Italy

BIB-IT-002

INTERNATIONAL INFORMATION SYSTEM FOR THE AGRICULTURAL SCIENCES AND TECHNOLOGY (AGRIS)

Food and Agriculture Organization of the United Nations
AGRIS Coordinating Centre
Via delle Terme di Caracalla
00100 Rome
Italy

Contact: A. Lebowitz, Head, AGRIS Coordinating Centre

Telephone: 57974347
Telex: 61181 FOODAGRI
Cable: FOODAGRI ROME

Mission and Function: The AGRIS data bank was established in 1975 by the Food and Agriculture Organization of the United Nations (FAO) and its member countries to serve as a single, comprehensive, current inventory of worldwide agricultural literature. AGRIS is a decentralized system in that each participating country is responsible for collecting, cataloging, and inputting document references to the agriculture literature published within its borders. There are currently over 100 countries participating in the system. The data are collected and processed centrally by FAO.

Types of Information Available: AGRIS is a bibliographic data bank covering all aspects of agriculture, including forestry, fisheries, human nutrition and veterinary medicine. Materials are collected in all languages and include journal articles, books, technical reports, maps and audio-visual items.

Data Elements and File Size: Data elements included in each bibliographic record consist of descriptive cataloging data, subject category, commodity and geographic codes. Some records contain abstracts and subject descriptors from national thesauri. Records are stored in the original language, and an English translated title is included with every non-English record. By the beginning of 1981 there were over 620,000 records in the entire data bank with an average of 10,000 added each month.

Processing Mode: AGRIS is a machine-readable data bank. Input from member countries is merged and processed by the AGRIS Processing Unit, located at the International Atomic Energy Agency, Vienna, Austria, under an agreement with FAO. Input and maintenance are done in a batch mode on an IBM 3032 computer. The data bank is also maintained on-line for subject retrieval using the IBM STAIRS retrieval system.

Products and Services: AGRIS makes available the entire data bank, on magnetic tape, to participating countries for their own national information systems. Dial-up access to the on-line data bank is also provided along with computer-printed and photocomposed listings. Training in both data preparation and subject retrieval is also provided.

Publications: *Agrindex* is published monthly for FAO by APIMONDIA, St. Pitar Mos, No. 20, Bucuresti, Romania. The subscription price is \$400 a year.

Availability of Products and Services: On-line access to the AGRIS data bank must be arranged through the national AGRIS Liaison Office. A list of these appear in each issue of *Agrindex*, or is available by writing the AGRIS Coordi-

nating Centre, Food and Agriculture Organization of the United Nations, Via delle Terme di Caracalla, Rome, Italy. Descriptive material about the system is also available from this office.

Future Plans: AGRIS is developing a controlled vocabulary for implementation in 1982. It is also expected that AGRIS will become more closely linked to other more specialized secondary services.

BIB-IT-003

ISTITUTO DI MALATTIE INFETTIVE, PROFILASSI E
POLIZIA VETERINARIA
(SE)

Via S. Giacomo 9/2
40126 Bologna
Italy

Contact: Giorgio Battelli

Telephone: 051 235301

Parent Organization: Universita degli Studi di Bologna
Bologna
Italy

Funding Organization: Consiglio Nazionale delle Ricerche
Piazzale delle Scienze, 7
00100 Roma
Italy

Mission and Function: The SE data bank was established in 1978 to collect and store bibliographic data on socio-economic consequences of animal diseases and zoonoses.

Types of Information Available: Bibliographic data are collected from worldwide sources, in all languages, of epidemiologic, statistical, and economic data on animal diseases and zoonoses. Most of the material in the data bank is derived from primary journals; only five percent of the data are derived from secondary bibliographic sources.

Data Elements and File Size: Each stored bibliographic record contains an accession number, descriptive cataloging data, and subject descriptors. The indexing vocabulary consists of Italian keywords from the *Veterinary Multilingual Thesaurus* of the European Economic Community. As many as 10 keywords are supplied per document, on the average. Index entries are coded by the organization's own system. The data bank is accessible by geographic index and by subject index. Approximately 300 records were in the

data bank in mid-1980, dating from 1978 to the present. The file is updated once a month.

Processing Mode: Data are processed and retrieved by batch mode on an Olivetti P 6060 minicomputer, with software developed in-house. Data are stored on disc.

Products and Services: Photocopies of computer printouts of bibliographic citations are produced, and photocopies of the original abstracts are made available. These products are distributed to users by mail. Services are provided on request.

Availability of Products and Services: Requests should be submitted by mail to Dr. Battelli or to the Director. Services are restricted to government agencies, research institutes, and farming organizations. No fees are charged for services, but mailing expenses are recovered. Descriptive information is available in Italian.

The Netherlands

BIB-NL-004

EXCERPTA MEDICA (EMBASE)

P.O. Box 1126
Keizersgracht 305
1000 BC Amsterdam
Netherlands

Contact: Robert R. Blanken, Executive Chief Editor

Telephone: (020)-264438
Telex: 14664 elnet nl

Mission and Function: The Excerpta Medica data base was established in 1969 to provide biomedical and drug-related information to researchers, medical specialists, government, and the pharmaceutical industry.

Types of Information Available: Bibliographic data on all aspects of biomedical and pharmaceutical sciences, forensic sciences, health economics, and environmental pollution are collected. Epidemiologic, laboratory, clinical, statistical, and economic data are gathered from worldwide literature, in all languages. Primary journals supply 95 percent of the material in the data bank; secondary bibliographic sources provide the remaining five percent.

Data Elements and File Size: Bibliographic records, stored both in the original language and in translation, contain descriptive cataloging data, subject descriptors, subject or

category codes, abstracts, and sponsoring agency or organization. On the average, 10 index postings per record are selected from a fixed vocabulary, MALIMET (Master List of Medical Indexing Terms). Index entries are coded by EMCLASS, a polyhierarchical classification, and by EMTAGS, item index numbers denoting broad or secondary concepts. Author, subject, and geographic indexes are created. The data bank, in 1980, contained 2.5 million records, dating from 1968 to the present. Approximately 230,000 records are processed annually, via weekly updates.

Processing Mode: Manual methods as well as batch and on-line computers are used for processing and retrieval. Magnetic tape, microforms, and discs are used for storage. EMBASE employs Digital Equipment Corporation PDP 11/45 hardware, and software packages developed in-house. The software packages are available to others.

Products and Services: Retrieval services available from EMBASE include bibliographies derived from the current file, retrospective bibliographies, selective dissemination of information services, and on-line access. Information products include a printed journal, computer printouts, microforms, and magnetic tape, which are made available by mail, interactive computer terminal, and teletypewriter. Services are provided weekly.

Publications: For information about publications, contact Mrs. M. Meyer, Excerpta Medica, 3131 Princeton Pike, Lawrenceville, N.J. 08648, U.S.A.

Availability of Products and Services: The data bank may be accessed on-line via the DIALOG and Euronet DIANE systems. Other requests may be sent by mail to Excerpta Medica. Services are available to all; fees vary. Descriptive materials are available in English, German, French, and Spanish.

Peru

BIB-PE-005

PROYECTO ESPECIAL UTILIZACION RACIONAL DE LA VICUNA (PEURV)

Avda. Sta. Cruz 734
Jesus Maria, Lima 18
Peru

Contact: Antonio Brack Egg

Telephone: 235833

Mission and Function: The Proyecto Especial Utilizacion Racional de la Vicuna has, for 15 years, collected information about diseases of vicuna. PEURV is in the process of developing the National Documentation Center about vicuna for the government of Peru.

Types of Information Available: National epidemiologic data on diseases of vicuna are collected in both bibliographic and research-in-progress form. Most (90 percent) of the material is derived from primary publications in Spanish, German, and English, and the remainder from secondary published sources.

Data Elements and File Size: Each bibliographic record contains descriptive cataloging data. The collection is accessible by author index. Records date from 1935 to the present.

Processing Mode: Records are stored and retrieved manually.

Products and Services: PEURV produces a printed abstract journal, which is distributed by mail.

Availability of Products and Services: Questions may be submitted to PEURV by mail. Services are available to all, without charge.

Portugal

BIB-PT-006

DIVISAO DE DOCUMENTACAO E INFORMACAO CIENTIFICA E TECNICA (DIVET)

Portugal. Ministerio da Agricultura e Pescas. Direccao Geral dos Servicos Veterinarios
Rua Victor Cordon, 4
Lisboa 1294 Codex
Portugal

Contact: Luisa Amelia Loup Baptista Braz, Chefe da Divisao

Telephone: 365165 or 365166

Funding Organization: Portugal. Ministerio da Agricultura e Pescas. Direccao Geral dos Servicos Pecuarios
Rua Victor Cordon, 4
Lisboa 1294 Codex
Portugal

Mission and Function: DIVET was established in 1974 to provide scientific information support for veterinary practitioners and students. It provides input to and disseminates bibliographic information from the AGRIS system of the Food and Agriculture Organization of the United Nations.

Types of Information Available: The data bank contains bibliographic data collected from worldwide sources of statistical information on animal disease, animal health, and production. Material in the data bank is derived predominantly from primary published sources in Portuguese, Spanish, Italian, French, German, and English; about twenty percent of the data are derived from secondary publications.

Data Elements and File Size: Data elements included in each stored bibliographic record include descriptive cataloging data and subject descriptors. Records are stored in the original language. On the average, three index postings, taken from a fixed vocabulary, are entered for each citation. Index entries are coded by the Universal Decimal Classification and the AGRIS Classification. Records are accessible by author and subject.

Processing Mode: Data are processed, stored, and retrieved manually.

Products and Services: The data bank provides reference service, retrospective bibliographies, and selective dissemination of information services. Services are provided on demand.

Availability of Products and Services: Services are restricted to veterinary practitioners and students, who may submit telephone or written inquiries. Fees are charged for retrieval services.

Future Plans: DIVET is currently preparing the Portuguese version of the *Veterinary Multilingual Thesaurus* of the European Economic Community. The *Thesaurus* will be used to index the records in the DIVET data bank, as the planned automation of the data bank is implemented.

BIB-PT-007

SERVICOS DE DOCUMENTACAO E INFORMACAO DA JUNTA NACIONAL DOS PRODUTOS PECUARIOS (S.D.I. DA J.N.P.P.)

Portugal. Junta Nacional dos Produtos Pecuarios
Rua Castilho, 36 - 40
1102 Lisboa Codex
Portugal

Contact: Maria Gabriela Coelho

Telephone: 55 88 91
 Telex: PROPEC 16764
 Cable: PECUARIOS

Mission and Function: The S.D.I., established in 1974 and currently in the developmental stage, provides information support for the Junta Nacional dos Produtos Pecuários. It is part of the Grupa de Trabalho para Documentacao e Informacao Economico-Social, pooling its information with that of other participants.

Types of Information Available: The data bank contains bibliographic, research-in-progress, and numerical data and photographic materials collected from published sources of epidemiologic, laboratory and clinical, statistical, and economic data. In addition to data on cattle health and disease, the data bank collects information on animal products, including skins, wool, milk, butter, cheese, poultry, and meat. Materials are derived from worldwide sources in Portuguese, Spanish, French, English, and Italian.

Data Elements and File Size: For each bibliographic citation stored, data elements consist of descriptive cataloging data and subject descriptors. On the average, three index postings, taken from a thesaurus, are entered for each record. Access to the data is provided by subject, author, and geographic indexes. Records are stored in the original language. There are currently 20,000 items in the data bank, dating from 1940 to the present. Approximately 2,500 items are added annually.

Processing Mode: Data are processed and retrieved manually, and are stored in manual files.

Products and Services: Retrieval services offered by S.D.I. include current reference service, retrospective bibliography preparation, and selective dissemination of information services. Information products consist of a weekly index journal distributed internally for current awareness purposes, and a card service. Products are delivered to users by mail, telephone, and teletypewriter.

Availability of Products and Services: There are no restrictions on access to the data bank, nor are there any special procedures for requesting access, nor fees for service.

United Kingdom

BIB-UK-008

DAIRY SCIENCE ABSTRACTS (DSA)

Commonwealth Bureau of Dairy Science and Technology
 Lane End House
 Shinfield
 Reading RG2 9BB
 U.K.

Contact: E. J. Mann

Telephone: (0734) 883895
 Telex: 847204

Parent Organization: Commonwealth Agricultural Bureaux
 Farnham House, Farnham Royal
 Slough SL2 3BN
 U.K.

Mission and Function: *Dairy Science Abstracts* has, since 1938, documented the world's literature on milk production and milk processing, and the diseases that affect production. The operation has been computerized since 1973. *Dairy Science Abstracts* is a subfile of the CAB Abstracts data base of the Commonwealth Agricultural Bureaux, and is searchable on-line through that data base by means of the DIALOG, ORBIT, IRS, and DIMDI retrieval services.

Types of Information Available: Bibliographic data are collected from worldwide sources of epidemiologic, laboratory, clinical, technological, statistical, and economic data on animal and human milk production, physiology, and chemistry; processing of milk and dairy products; public health aspects of milk production; and mastitis and other diseases affecting milk production. Approximately 95 percent of the documents in the data bank are derived from primary journals, and five percent from secondary publications in all languages.

Data Elements and File Size: Data elements included in each stored record consist of descriptive cataloging data, subject descriptors, subject section codes and cross references, and abstracts. Bibliographic information is stored both in the original language and in translation; abstracts are stored in English only. On the average, five index postings, derived from a fixed vocabulary, are supplied for each document. They are coded according to abstract sequence. Author, subject, and geographic access to the data are provided. In mid-1980, there were 50,000 records in the automated portion of the data base, dating from 1973. Approximately 8,500 documents are processed annually. The data base is updated monthly.

Processing Mode: Both manual and on-line computer methods are employed for data processing and retrieval.

Products and Services: Current and retrospective bibliographic searches are available from the Bureau, and direct

on-line access may be obtained. Information is delivered to users by telephone and by interactive computer terminals. A monthly abstract journal is the principal product of the data base, although annotated bibliographies on specialized topics are also produced.

Publications: *Dairy Science Abstracts*, issued monthly, has been published since 1938. Back volumes and microform editions of back volumes are available. Inquiries about rates for current subscriptions and back volumes should be sent to Central Sales, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K. The *Mastitis Literature Survey*, an annotated bibliography derived from *Dairy Science Abstracts* and the *Veterinary Bulletin*, has been issued annually since 1971. It is available for sale by the Commonwealth Bureau of Dairy Science and Technology. The 1979 edition, published in 1980, costs £9.60.

Availability of Products and Services: Retrieval services are available from the Bureau without restriction, for a fee. Users may obtain *Dairy Science Abstracts* by subscription, or search it on-line via DIALOG, ORBIT, IRS, or DIMDI. Inquiries about data base charges and publication sales should be addressed to Central Sales, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K.

BIB-UK-009

HELMINTHOLOGICAL ABSTRACTS, SERIES A – ANIMAL AND HUMAN HELMINTHOLOGY

Commonwealth Institute of Helminthology
103 St. Peters St.
St. Albans
Herts. AL1 3EW
U.K.

Contact: The Director

Telephone: St. Albans 33151
Cable: HELM AB, St. Albans

Parent Organization: Commonwealth Agricultural Bureaux
Farnham House, Farnham Royal
Slough SL2 3BN
U.K.

Mission and Function: Established in 1930, *Helminthological Abstracts* provides a comprehensive abstracting service of all published papers generated worldwide in helminthology. The data bank is searchable as a subfile of CAB Ab-

stracts, the combined data bases of the Commonwealth Agricultural Bureaux.

Types of Information Available: Bibliographic data and abstracts are compiled from worldwide sources of information on the biology, taxonomy, and control of helminth parasites in animal hosts, and human helminth infections. Ninety percent of the records in the data bank are derived from primary published sources, in all languages, of epidemiologic, laboratory, and clinical data and statistics on helminthology; the remaining 10 percent are derived from secondary publications.

Data Elements and File Size: Data elements in the bibliographic records consist of descriptive cataloging data, subject descriptors, subject or category codes, and abstracts. Records are stored both in translation and in the original language. Approximately seven index postings are entered for each record, using keywords from the title or text of the document. Author and subject indexes are provided. Entries are coded by a rotational method. There were 400,000 records in the data bank in mid-1980; 6,000 records are added annually. The earliest record in the system is dated 1930; the most recent is current. The data bank is updated 12 times a year.

Processing Mode: The data bank uses manual and computer on-line methods for both processing and retrieval. Records are stored in manual files (covering the period 1930 to 1976) and on magnetic tape.

Products and Services: Retrieval services include retrospective bibliographic searches, on-line access, and selective dissemination of information services. Information products consist of microforms and published abstract journals, literature reviews, bibliographies, books, and reports, which are delivered to users by mail. Additional services include photocopy and inquiry services and a service for identification of helminths.

Publications: *Helminthological Abstracts, Series A - Animal and Human Helminthology*, is published monthly; *Series B - Plant Nematology*, is published quarterly. Volumes 1 through 38 included both helminthology and plant nematology; since volume 39, 1970, the two series have been issued separately. Back volumes are available. Information on subscription rates may be obtained from Central Sales, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K. The Institute also publishes a series, *C.I.H. Keys to the Nematode Parasites of Vertebrates*, edited by Roy C. Anderson, Alain G. Chabaud, and Sheila Willmott. Contact the Institute for information on availability of the series or any of the seven volumes published to date.

Availability of Products and Services: Retrieval services are generally available and are accessible on-line, through

the printed journal, or by visit to the Institute. Fees are charged to non-Commonwealth users. Information on data base charges and other publications may be obtained from the Sales Director, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K. Cumulated author and subject manual indexes covering the period 1930 to 1976 may be consulted at the Institute, where the holdings of the library and its large collection of reprints may be examined, and bibliographic and linguistic consultation may be obtained. The staff will also undertake manual searches for research workers, although a charge for labor may be made. Descriptive material is available in English.

BIB-UK-010

INDEX VETERINARIUS

Commonwealth Bureau of Animal Health
New Haw
Weybridge
Surrey KT15 3NB
U.K.

Contact: The Director

Telephone: Byfleet (09323) 42826

Parent Organization: Commonwealth Agricultural Bureaux
Farnham House, Farnham Royal
Slough SL2 3BN
U.K.

Mission and Function: The mission of *Index Veterinarius* is the storage and retrieval of citations to titles of worldwide information on animal health and disease. The data bank was established in 1933 and was computerized in 1972. It is a subfile of the comprehensive data base of the Commonwealth Agricultural Bureaux, derived from twenty published secondary bibliographic tools citing agricultural literature.

Types of Information Available: The data base contains bibliographic data that are collected mainly from primary journals publishing epidemiologic, laboratory, clinical, and economic information on animal health and disease. Approximately two percent of the documents in the data bank are derived from published secondary sources. Data are collected worldwide from sources in all languages.

Data Elements and File Size: Bibliographic data elements included in each stored record consist of descriptive cataloging data and subject descriptors. Records are stored both

in the original language and in translation. An average of seven index postings per citation, selected from a fixed vocabulary developed by CAB, are entered for each record. The literature covered is indexed by author, subject, and geographic location. Approximately 175,000 records were in the data bank by mid-1980. The earliest is dated 1972. The file is updated once a month, with 20,000 records added annually.

Processing Mode: The data are accessible from the published index as well as the computer-stored record. Records are stored on magnetic tape. The software package was developed within the organization.

Products and Services: Both current and retrospective bibliographic printouts of the file are provided. Information products consist of computer printouts, magnetic tape, photocopies of original documents, and published index journals and bulletins. Information is made available to users by telephone or mail. Output services are provided monthly, with annual cumulations. On-line access is available through CAB and its vendors, including DIALOG, ORBIT, IRS, and DIMDI.

Availability of Products and Services: Services are available to all upon request, for a fee. Information on data base charges and publication sales may be obtained from the Sales Director, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K.

BIB-UK-011

IRL LIFE SCIENCES COLLECTION

Information Retrieval, Limited
1 Falconberg Ct.
London W1V 5FG
U.K.

Contact: Miss J. F. Ryan, Systems Editor

Telephone: 01-437-5362

Telex: London 28398 (Answerback WOOLCT G)

Mission and Function: The IRL Life Sciences Collection had its origin in 1965, when Information Retrieval Limited began to publish *Microbiology Abstracts*. More abstracting journals were added, and production was automated in 1978. The resulting data bank's mission is to provide information on current research in certain aspects of the life sciences, as covered in IRL's 15 abstract journals. The data bank is publicly available on-line as File 76 of the DIALOG Information Retrieval Service.

Types of Information Available: Worldwide bibliographic data are collected entirely from primary published sources of epidemiologic, laboratory and clinical, statistical, and economic data and patents on microbiology, biochemistry, immunology, toxicology, genetics, entomology, animal behavior, ecology, chemoreception, calcified tissues, and virology. All languages are covered.

Data Elements and File Size: Each stored bibliographic record contains descriptive cataloging data, subject descriptors, and subject or category codes; most contain abstracts. Since an abstract may appear in more than one of IRL's journals, section codes and descriptors that apply to each journal are included in the record. Approximately ten index postings are assigned to each record from thesauri developed for each journal. The maximum number of descriptors is 30. Chemical substances entered since late 1980 are coded by the Wiswesser Line Notation. All records are stored in English translation. Author and subject indexes are provided; geographic access is provided through the subject index. There were 350,000 records in the data bank in mid-1980, dating from January 1978 to the present. Monthly updates add approximately 125,000 documents to the file each year.

Processing Mode: Batch and on-line computer processing are used to produce the data base. Data are stored on magnetic tape and disc. IRL uses the IBM computer configuration at the Imperial Chemical Industries, Billingham, Cleveland, England, and employs ASSASSIN software developed by ICI's Agricultural Division.

Products and Services: Retrieval services include current and retrospective bibliographic printouts, selective dissemination of information service, and direct on-line access through DIALOG. IRL's information products include computer printouts, microforms, magnetic tapes, and a series of published abstract journals. Products are delivered to users by mail and through computer terminals in the interactive mode. Output services are provided weekly, monthly, and quarterly.

Publications: The following monthly abstracting journals are produced by the IRL system: *Animal Behaviour Abstracts*; *Immunology Abstracts*; *Microbiology Abstracts*, Section A: *Industrial and Applied Microbiology*; *Microbiology Abstracts*, Section B: *Bacteriology*; *Microbiology Abstracts*, Section C: *Algology, Mycology, and Protozoology*; *Biochemistry Abstracts*, Part 1: *Biological Membranes*; *Biochemistry Abstracts*, Part 2: *Nucleic Acids*; *Biochemistry Abstracts*, Part 3: *Amino-Acids, Peptides, and Proteins*; *Calcified Tissue Abstracts*; *Toxicology Abstracts*; *Virology Abstracts*; *Chemoreception Abstracts*; *Ecology Abstracts*; *Entomology Abstracts*; and *Genetics Abstracts*. Prices vary; contact IRL for current rates. An on-line users' manual and

published thesaurus for use in searching the Life Sciences Collection are also available. In addition to the abstract journals comprising the data bank, IRL publishes four primary research journals, books, bibliographies, and symposium proceedings.

Availability of Products and Services: Services and publications are available to all, for a fee. The IRL Life Sciences Collection may be searched directly by users of DIALOG, or will be searched on demand by IRL. Descriptive material is available in English.

Future Plans: IRL plans to issue two new types of publications: *Current Alerts*, a weekly current awareness service in computer printout form; and monthly "mini" abstract journals on specialized topics, such as veterinary microbiology.

BIB-UK-012

PROTOZOOLOGICAL ABSTRACTS

Commonwealth Institute of Helminthology
103 St. Peters St.
St. Albans
Herts. AL1 3EW
U.K.

Contact: The Director

Telephone: St. Albans 33151
Cable: HELM AB, St. Albans

Parent Organization: Commonwealth Agricultural Bureaux
Farnham House, Farnham Royal
Slough SL2 3BN
U.K.

Mission and Function: *Protozoological Abstracts*, established in 1977, provides a comprehensive abstracting service for world literature on parasitic protozoa. The data bank is linked as a subfile to CAB Abstracts, the combined on-line data bases of the Commonwealth Agricultural Bureaux. **Types of Information Available:** Bibliographic data and abstracts are compiled from worldwide information on the morphology, biology, taxonomy, and control of parasitic protozoa and human and animal protozoal diseases. Ninety percent of the records in the data bank are derived from primary published epidemiologic, laboratory, and clinical data and statistics on protozoa; ten percent are derived from secondary publications. Information is collected in all languages.

Data Elements and File Size: Bibliographic records consist of descriptive cataloging data, subject descriptors, subject or category codes, and abstracts. Records are stored both in the original language and in translation. Approximately seven index postings are entered for each record, using keywords from the title or text. Entries are coded according to a rotational method. Author and subject indexes are provided. By mid-1980, there were 15,000 records in the data bank, with 5,000 records added annually. The data bank is updated 12 times a year. Records date from 1975 to the present.

Processing Mode: Data are processed and retrieved by on-line computer at the Commonwealth Agricultural Bureaux' facility. Records are stored on magnetic tape.

Products and Services: Retrieval services include bibliographic printouts, on-line access, and selective dissemination of information services. Information products include microforms, a monthly abstract journal and literature review, and published bibliographies, books, and reviews, which are delivered to users by mail. Photocopy and bibliographical reference services are also available.

Publications: *Protozoological Abstracts* has been published monthly since 1977. It is indexed monthly and annually by subject and author.

Availability of Products and Services: Retrieval services are generally available, and are accessible on-line, through the printed journal, or by visiting the Institute. A fee is charged for services. Information on data base charges and other publications may be obtained from the Sales Director, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K. Descriptive material is available in English.

BIB-UK-013

**REVIEW OF APPLIED ENTOMOLOGY, SERIES B
(MEDICAL AND VETERINARY)
(RAE(B) OR REV. APPL. ENT. (B))**

Commonwealth Institute of Entomology
56 Queen's Gate
London SW7 5JR
U.K.

Contact: The Director, for editorial queries; or the Librarian-Information Officer, for search queries

Telephone: 01-584-0067
Cable: ENTINFO London SW7

Parent Organization: Commonwealth Agricultural Bureaux
Farnham House, Farnham Royal
Slough SL2 3BN
U.K.

Mission and Function: The mission of the data bank is to disseminate information on published literature on all aspects of insects and other arthropods which convey disease or are otherwise injurious to man and to animals of significance to man. The data bank was established in 1913. It is a subfile of CAB Abstracts and provides some input to the AGRIS system.

Types of Information Available: Bibliographic data are collected worldwide from published information on animal health and disease and medical entomology. More than 99 percent of the materials in the data bank are derived from primary journals containing epidemiologic, laboratory, and clinical data and statistics on animal health and disease; the remaining material is derived from secondary publications.

Data Elements and File Size: Data elements included in each bibliographic record consist of descriptive cataloging data, subject descriptors, subject or category codes, abstracts, sponsoring agencies or organizations, and numerical data. Records of non-English literature are stored both in translation and in the original language. On the average, nine index postings from a fixed vocabulary are entered for each record and are coded according to an in-house classification system. Free-text searches of the file may be undertaken via computer, as well as searches by controlled vocabulary descriptors. Author and subject indexes are also provided. There were 23,400 records in the data bank in mid-1980, with 3,500 records added annually. The data bank is updated 12 times a year. The earliest record in the data bank is dated 1970; the most recent, 1981.

Processing Mode: The data bank uses manual, computer batch processing, and computer on-line methods for processing and retrieval. Records are stored manually and on magnetic tape, microforms, and disc. A software package, developed in-house, is used, and is available for use by others.

Products and Services: In addition to bibliographic printouts, on-line access and selective dissemination of information services are provided. Information products are offered in the form of computer printouts; card service; microforms; magnetic tape; and published abstracting and primary journals, annotated bibliographies, and books. Services are delivered to users by mail, teletypewriter printout, or interactive computer terminals. New materials are produced monthly.

Availability of Products and Services: Retrieval services are generally available for a fee. Access through host sys-

tems (such as DIALOG, ORBIT, and QUEST) is subject only to their respective procedures. Information on data base charges and vendors may be obtained from the Sales Director, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K. Descriptive material is available in English.

Future Plans: The data bank will probably continue to be made available through an increasing number of host systems and vendors in more countries.

BIB-UK-014

VETDOC

Derwent Publications
Rochdale House
128 Theobalds Rd.
London WC1X 8RP
U.K.

Contact: H. Birnbaum, Director, Literature Division

Telephone: 01-242-5823

Telex: 267487

Cable: DERWENTINF, London

Mission and Function: The mission of the VETDOC data bank is to store information and documentation on veterinary products. This commercial data bank was established in 1968 and is presently in full operation.

Types of Information Available: Bibliographic and research-in-progress data are collected worldwide from sources in all languages on animal health and disease. As much as 95 percent of the data in the system are derived from primary publications containing epidemiologic, laboratory, and clinical data and statistics; the remaining five percent are derived from published secondary sources that pertain to veterinary therapeutic agents or are of significance to veterinary pharmacologic research or practice.

Data Elements and File Size: Data elements for each stored bibliographic record consist of descriptive cataloging data, subject descriptors, subject or category codes, biosystematic classification codes, abstracts, and numerical data. On the average, 12 index postings are entered for each record. These include terms from a fixed vocabulary and keywords from the title or the text of the document. In addition, 50 codes are entered for each record. Index entries are coded by the ring code or codeless scanning method. Author and subject indexes are provided; records may also be retrieved by geographic location. There were, in mid-1980, 52,000

records in the data bank, with 4,000 records added annually. The data bank is updated 20 times a year. The earliest record in the file is dated 1968; the most recent, 1981. Records are stored in English translation.

Processing Mode: The data bank uses manual processing, punched cards, computer batch processing, and computer on-line processing for data entry and retrieval. Storage methods include manual files, punched cards, magnetic tape, and disc. The data bank uses an IBM computer. Its software, developed by Derwent, is available for use by others.

Products and Services: In addition to current and retrospective bibliographic searches, on-line access and selective dissemination of information services are provided. Information products consist of microforms, card service, magnetic tape, machine punched cards, index cards, and a published abstract journal. These products are delivered to users by mail. Technical assistance also is provided. New material is produced 20 times a year.

Availability of Products and Services: Services are available to subscribers only. Descriptive materials are available in English.

BIB-UK-015

VETERINARY BULLETIN

Commonwealth Bureau of Animal Health
New Haw
Weybridge
Surrey KT15 3NB
U.K.

Contact: The Director

Telephone: Byfleet (09323) 42826

Parent Organization: Commonwealth Agricultural Bureaux
Farnham House, Farnham Royal
Slough SL2 3BN
U.K.

Mission and Function: The function of the data bank is to abstract world literature and review articles on animal health and disease. The data bank, established in 1930, was computerized in 1972. It is a subfile of the CAB Abstracts system of the Commonwealth Agricultural Bureaux, and duplicates a selected portion of the documents cited by *Index Veterinarius*, which is also produced by the Commonwealth Bureau of Animal Health.

Types of Information Available: Bibliographic data are collected from worldwide literature, in all languages, on animal health and disease. Ninety-eight percent of the citations in the data bank are derived from primary literature sources of epidemiologic, laboratory, clinical, and economic data; the remaining two percent, from published secondary sources.

Data Elements and File Size: Data elements include descriptive cataloging data, subject descriptors, subject category codes, and abstracts. On the average, three index postings from a fixed vocabulary are assigned to each record. Author, subject, and geographic access to the records is provided. Titles of non-English language citations are stored both in the original language and in translation. As of mid-1980, there were 60,000 records in the data bank; 7,800 records are added each year. The earliest is dated 1972. Updates of the data bank are made monthly.

Processing Mode: The data bank uses both manual and computer on-line methods for processing and retrieval. Records are stored on magnetic tape. The system uses software developed within the organization.

Products and Services: Retrieval services include both current and retrospective bibliographies. Information products are offered in the form of computer printouts, magnetic tape, and published abstract journals and literature reviews. Information is delivered to users by telephone and through the mail. New material is produced monthly. Photocopies and loans of original articles also are offered. On-line access is available through the CAB Abstracts file, and the vendors that handle that system.

Availability of Products and Services: Services are available for a fee, without restriction. Information on data base charges and vendors may be obtained from the Sales Director, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K.

Future Plans: Improvement of processing input and creation of a thesaurus are planned.

United States

BIB-US-016

AGRICULTURAL ON-LINE ACCESS (AGRICOLA)

United States. Department of Agriculture. Science and Education Administration. Technical Information Systems National Agricultural Library Bldg.
Beltsville MD 20785
U.S.A.

Contact: Jesse Ostroff, Technical Liaison Officer for Animal Science and Industry

Telephone: (301) 344-3405

Mission and Function: AGRICOLA, the machine-readable data base produced by the U.S. Department of Agriculture's Technical Information Systems (TIS) to support bibliographic research by agricultural scientists, originated in 1970 as the cataloging and indexing system of the National Agricultural Library (NAL). It has since been expanded to incorporate bibliographic data from other sources, including the Food and Nutrition Information and Education Resources Center (FNIC), the American Agricultural Economics Documentation Center (AAEDC), and the Brucellosis Subfile of the Animal and Plant Health Inspection Service (APHIS).

Types of Information Available: Bibliographic data are collected on all aspects of worldwide agricultural sciences, including agricultural economics, rural sociology, agricultural products, animal husbandry, agricultural engineering, botany, entomology, animal and human nutrition, forestry, pesticides, plant and animal sciences, soils and fertilizers, veterinary medicine, chemistry, and environmental pollution. TIS attempts to be exhaustive in its coverage of agriculture, botany, veterinary medicine related to livestock and poultry, and entomology, and more selective in coverage of related subjects. The data included in AGRICOLA represent cataloging records for periodicals and serials, monographs, and translations entered into the collection of NAL; indexing records of significant articles selected by TIS from approximately 6,000 serials and monographs per year; abstracts and indexing records of the FNIC, which specializes in nutrition education and institutional food service; bibliographic data entered by AAEDC into its data base on agricultural economics, AGECON; bibliographic data on environmental impact statements, excerpted from *EIS: Digests of Environmental Impact Statements*, published by Information Resources Press; and, in the Brucellosis Subfile, citations to published works on brucellosis, including the etiology, epidemiology, pathology, treatment, prevention and economic impact of this disease. The Brucellosis Subfile is produced by the Cattle Disease Program of the Animal and Plant Health Inspection Service of USDA.

Data Elements and File Size: Bibliographic unit records may include subject category codes, language codes, publication and indexing dates, personal or corporate authors, title, bibliographic citation or document source, geographic descriptors, subject descriptors, and document type. Actual data elements vary according to subfile. For example,

FNIC records contain abstracts, whereas the titles of other indexed articles may be enriched through the addition of explanatory terms for improved retrievability. The Brucellosis Subfile is indexed with terms and classifications in the APHIS *Animal Disease Thesaurus*. Various data elements may be made searchable by the different on-line vendors that offer AGRICOLA as a publicly-accessible data base. Among the subject categories used by AGRICOLA are a number that pertain to animal health and disease. These categories are compatible with the AGRIS category coding system that includes: Veterinary science and hygiene; Diagnostic tests of animals—general and miscellaneous; Diagnostic tests of animals—insects; Diagnostic tests of animals—helminths; Animal diseases—general; Animal diseases—fungal; Animal diseases—protozoal; Animal diseases—bacterial; Animal diseases—viral; Animal diseases—physiological; Miscellaneous animal disorders (includes reproductive disorders); Protection of animal products—general and miscellaneous; Protection of animal products—insects; Fish diseases; and Protection of fish products. As of October 1981, AGRICOLA contained approximately 1.5 million records, input since 1970. The file grows at the rate of approximately 145,000 records per year.

Processing Mode: AGRICOLA uses an IBM 3033 main-frame computer, model A-16, for processing, and a Four-Phase minicomputer for data entry.

Products and Services: Two periodical publications are generated monthly from the AGRICOLA data base: the *Bibliography of Agriculture*, which is the subject index to agricultural journal literature, and the *National Agricultural Library Catalog*. AGRICOLA magnetic tapes are available for sale, and the data base is also accessible on-line through three vendors, allowing users to perform their own current and retrospective literature searches and to establish selective dissemination of information profiles. AGRICOLA tapes are also made available by vendors that offer batch processing for retrospective searches and selective dissemination services. The resources of the TIS collection of source publications and documents cited in AGRICOLA are available to researchers at the National Agricultural Library Building in Beltsville, MD, or at other libraries through interlibrary loan service. AGRICOLA tapes are issued monthly; other services are offered on demand.

Publications: The *Bibliography of Agriculture* is published monthly by Oryx Press, Inc., 2214 North Central at Encanto, Phoenix, AZ 85004. Subscriptions cost \$285 per year. Annual cumulative volumes, from 1976 to 1981 are available for \$225 each. The *National Agricultural Library Catalog*, published monthly since 1966 by Rowman and Littlefield, Inc., 81 Adams Dr., Box 327, Totowa, NJ 07511, is available by subscription for \$148 per year. Cumulated

volumes are also available; contact the publisher for further information.

Availability of Products and Services: Products and services derived from AGRICOLA are available without restriction. On-line access is offered by DIALOG, ORBIT, and BRS; contact these vendors for information on hourly charges. AGRICOLA magnetic tapes, at 1600 bits per inch, may be purchased from the National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22161, U.S.A., for \$60 per reel (U.S. purchasers). There is a 50 percent surcharge for foreign purchasers. A one-year subscription to 12 AGRICOLA tapes costs \$720 (domestic). Retrospective tapes covering the period from January 1979 to October 1980 cost \$480; 25 reels covering data from 1970 through 1978 cost \$1500. Beginning in 1982, there will be a use fee of \$2.00 per hour (\$3.00 foreign) for on-line access, in addition to the connect time charges established by each vendor. Fees will also be charged for batch searching of AGRICOLA tapes. These unit charges are based on a sliding scale that varies with the annual level of usage. When fewer than 2,600 units are used, the annual charge is \$0.35 each (\$0.45 foreign); when 2,600 to 15,000 units are used, the charge is \$0.25 each (\$0.35 foreign); and when more than 15,000 units are used, the charge is \$0.20 each (\$0.30 foreign). Access to microfilmed source documents in the Brucellosis Subfile is available to USDA animal disease control personnel through the Animal and Plant Health Inspection Service's Emergency Programs Information Center.

BIB-US-017

ANIMAL INFORMATION FILE (AIF)

Oak Ridge National Laboratory
EMIC, Bldg. 9224
P.O. Box Y
Oak Ridge TN 37830
U.S.A.

Contact: M. Francis or K. Miller

Telephone: (615) 574-7871; or FTS 624-7871
Telex: 810 572 1076 USDOE OKR

Parent Organization: United States. Department of Energy

Funding Organization: National Toxicology Program
 P.O. Box 12333
 Research Triangle Park NC 27709
 U.S.A.

Mission and Function: The mission of the Animal Information File is to compile, organize, and disseminate published information on strains of laboratory animals used in research reports collected by the Environmental Mutagen Information Center (EMIC) and the Environmental Teratology Information Center (ETIC). In effect, AIF serves as a cross reference to EMIC and ETIC. AIF collects data on the animals' origins; their physiologic, genetic, and reproductive characteristics; and their responses to chemical agents. Established in 1980, the data bank is still in the developmental stage.

Types of Information Available: The data base contains bibliographic data, keywords, and comparative statements from worldwide literature on laboratory and clinical data; information on strain origin, location, and history; descriptions of the experimental assay systems employed; and comparative data from other animals.

Data Elements and File Size: A record consists of a colony of animals, and citations to that colony. Data elements for each stored record consist of descriptive cataloging data for literature that references the strain of animal; subject descriptors; biosystematic classification codes; chemical names; and Chemical Abstracts Service (CAS) Registry Numbers. Data are accessible by subject, author, chemical name, and CAS Registry Number. Approximately 15 index postings, coded by EMIC accession number and CAS Registry Number, are entered for each record. The indexing vocabulary consists of keywords from the title and text of relevant citations, and terms from a fixed vocabulary. As of 1981, approximately 900 colonies are recorded in the file.

Processing Mode: The AIF data bank uses manual processing, punched cards, and an on-line computer for processing and retrieval, with a software package developed in-house. Records are stored on magnetic tape.

Products and Services: Reference service is available. Information products consist of computer printouts of citations delivered to users via telephone and mail. Service is provided on request, as time permits.

Availability of Products and Services: Retrieval services are generally available, on a reciprocal exchange basis. Inquiries by telephone or mail should be directed to M. Francis or K. Miller. Users are strongly urged to refer to the documents cited by AIF, and not to rely solely on data in the file.

Future Plans: The data bank may be made available on-line through RECON.

BIB-US-018

AQUASCIENCE RESEARCH GROUP: DRUGS AND CHEMICALS USED IN FISH MEDICINE (ARG – FISHDRUG)

Aquascience Research Group
 512 East 12th Ave.
 North Kansas City MO 64116
 U.S.A.

Contact: John Farrell Kuhns, Director

Telephone: (816) 842-2590, ext. 6

Mission and Function: The ARG-FISHDRUG data bank was established in 1978 to list sources of information on drugs and chemicals used in treating fish diseases.

Types of Information Available: The data bank contains bibliographic citations to published reports of laboratory and clinical data on fish health and disease, and references to chemicals and drugs used in treating fish disease. Sources are collected worldwide in all languages. Most (80 percent) of the input is derived from primary journals; the rest from secondary publications.

Data Elements and File Size: The data elements for each stored bibliographic record consist of descriptive cataloging data and a subject descriptor. One index posting, consisting of a keyword from the text or title, generally is entered for each record. Records are stored in English translation. Author and subject indexes are provided. There were 1,575 records in the data bank in mid-1980, with 200 records added annually. The earliest record in the data bank dates from 1950. The data bank is updated at least once a year.

Processing Mode: The data bank uses manual and computer batch processing. Records are stored in manual files and on discs. In-house software packages, which are available to other data banks, are used.

Products and Services: Bibliographic listings and selective dissemination of information services are provided. Information products consist of computer printouts and photocopies of cited documents, which are delivered to users by mail. Output is provided on demand.

Availability of Products and Services: Requests for services should be addressed by telephone or mail to the director. Services are available without restriction. A fee of \$2.50 per page is charged for printouts.

BIB-US-019

**BIOSCIENCES INFORMATION SERVICE
(BIOSIS)**

2100 Arch St.
Philadelphia PA 19103
U.S.A.

Contact: A. W. Elias, Director for Professional Services

Telephone: (215) 568-4016, ext. 201
Telex: 831739
Cable: BIOSIS

Mission and Function: BIOSIS is an abstracting and indexing service providing access to biological and biomedical research from around the world through complete bibliographic citations to the published literature, abstracts, content summaries, and indexes. *Biological Abstracts* was first issued in printed form in 1926; the data bank has been automated since 1969.

Types of Information Available: Bibliographic data and abstracts of worldwide literature are collected on all aspects of research in the life sciences, including epidemiologic data, laboratory data, clinical data, and statistics. Among the 600 biological and biomedical subject categories are animal distribution and zoogeography, animal production, and veterinary science. Approximately 95 percent of the citations are derived from primary published sources in all languages, and five percent from secondary bibliographic sources.

Data Elements and File Size: Stored bibliographic records contain descriptive cataloging data, author affiliation, subject descriptors, subject category codes, and biosystematic classification codes. The *BIOSIS Previews* file consists of these subject and bibliographic data only. Records processed for *Biological Abstracts on Tape* also include abstracts. Records included in *Biological Abstracts-RRM* may contain numerical data reported in research studies. For each unit record, there are approximately 13 entry points, consisting of keywords, concept codes, and biosystematic codes developed by BIOSIS. Records are accessible by author, subject, concept (broad subject categories), generic index (genus and species) or biosystematic index (broad taxonomic categories). As of mid-1980, the data bank contained nearly 5 million records, dating from 1927. Of these, the citation data contained in *BIOSIS Previews* are accessible on-line from 1969 to the present. *Biological Abstracts on Tape* allows on-line access to abstracts as well as citations from mid-1976 to the present. In 1980, approximate-

ly 290,000 records were expected to be processed; in 1981, a processing volume of 300,000 items is expected. The data bank is updated three times a month. Records are stored in English translation.

Processing Mode: Manual processing methods are supplemented by computer batch and on-line processing and retrieval techniques. Data are stored in printed form and microform, and on magnetic tape and disc. The system employs an IBM 370/145 mainframe and an IBM OS/VSI operating system. Both standard and proprietary software packages are used. The proprietary software has been shared in the course of cooperative projects with other information services.

Products and Services: Services consist of access to current and retrospective bibliographic data, and selective dissemination of information service. On-line access is available through vendors. Information products are provided in the form of printed journals; computer printouts, such as the BIOSIS Standard Profile current awareness service on 28 research topics; microforms; a card service, the customized Current Literature Alerting Search Service (C.L.A.S.S.); and magnetic tape. Products are delivered by mail, or through interactive terminals connected with on-line vendors' computers. In addition to its principal abstracting and indexing services, BIOSIS derives specialty publications from its literature sources. Most services are provided monthly, although magnetic tapes for *BIOSIS Previews* are shipped three times per month. Training programs are offered, and educational materials designed to promote effective use of BIOSIS products and services are available.

Publications: *Biological Abstracts*, published since 1927, is a monthly abstracting journal covering over 8,000 serial and non-serial publications. Its printed format costs \$1,675 per year for U.S. subscribers and \$1,850 per year for non-U.S. subscribers. Cumulative indexes are available to U.S. and non-U.S. subscribers for \$665 and \$750, respectively. The 16-mm microfilm edition is leased for approximately \$11,455 for the years 1927 through 1980, and \$1,850 for 1981. Indexes on microfilm are available only through 1979 and in specific cumulations, through a separate lease agreement; prices vary. *Biological Abstracts on Tape* (BAT) corresponds to the print version from mid-1976; inquire about the lease fee. *Biological Abstracts-RRM*, which supersedes *BioResearch Index*, provides content summaries for research reports, reviews, and meetings in biology and biomedicine. Subscriptions to *BA-RRM* cost \$840 per year (U.S.) and \$920 per year (non-U.S.); cumulative indexes cost \$340 and \$380 for U.S. and non-U.S. subscribers. Monthly specialty publications derived from *Biological Abstracts* and *Biological Abstracts-RRM* consist of *Ab-*

stracts of Mycology, Abstracts of Entomology, Abstracts on Health Effects of Environmental Pollutants, and the 14 topical editions of *BioResearch Today*. Subscriptions to *Abstracts of Mycology* and *Abstracts of Entomology* each cost \$100 per year; \$40 per year for the annual cumulative index. *Abstracts on Health Effects of Environmental Pollutants* costs \$130 per year, and its annual cumulative index \$55 per year. Journals issued under the collective title of *Bio-Research Today* consist of abstracts on 14 research topics, selected from every two issues of *Biological Abstracts*. Two of these fourteen separate titles are *Human and Animal Aging* and *Human and Animal Parasitology*. Each subscription costs \$65 per year.

Availability of Products and Services: Services are available without restriction; fees vary. Publications, magnetic tape, microforms, current awareness services, selective dissemination services, and customized literature searches are available from BIOSIS. Call (800) 523-4806 (in the U.S.) for information and fee quotations. On-line and off-line file searches are available through a number of vendors throughout the world; their fees vary. Contact BIOSIS for a list of these vendor organizations. A brochure in English, describing products and services, is available from BIOSIS, 2100 Arch St., Philadelphia PA 19103, U.S.A.

BIB-US-020

CHEMICAL ABSTRACTS (CA)

Chemical Abstracts Service
P.O. Box 3012
Columbus OH 43210
U.S.A.

Contact: Gail B. Palmer, Marketing Writer

Telephone: (614) 421-6940
Telex: 810-482-1608
Cable: CHEMABS

Mission and Function: Created in 1907, *Chemical Abstracts* provides abstracts and indexes to the world's chemical and chemical engineering literature.

Types of Information Available: Bibliographic, research-in-progress, and numerical data are collected from worldwide published sources of epidemiologic data, laboratory data, and statistics on chemistry and chemical engineering. All material in the data bank is derived from printed sources in all languages. Within this comprehensive chemi-

cal data base, Sections 1, 4, 13, 14, and 18, dealing with pharmacodynamics, toxicology, mammalian biochemistry, mammalian pathological biochemistry, and animal nutrition, are of primary relevance to animal health and disease. **Data Elements and File Size:** Each stored bibliographic record contains descriptive cataloging data, subject descriptors, abstracts, and contract, grant, or project numbers. Records are stored in English. On the average, 15 index postings are supplied for each document, consisting of keywords from the title or text, as well as terms selected from a fixed vocabulary. Records may be accessed by subject terms, author, patent, molecular formula, chemical substance or its CAS Registry Number, or by the index of ring systems. As of mid-1980, there were 8.1 million records in the data bank, dating from 1907 to the present. The data bank grows at the rate of 450,000 records each year, added in biweekly updates.

Processing Mode: Both batch and on-line computer modes are used for data processing and retrieval. Data are stored on magnetic tape, disc, and microforms. *Chemical Abstracts* employs IBM 360/168 hardware and proprietary software, not made available outside the organization.

Products and Services: In addition to the printed abstracting journals, *Chemical Abstracts* supplies current and retrospective bibliographic printouts and selective dissemination of information services. Information may be provided in published form or as computer printouts, microforms, or magnetic tapes, available through the mail or via interactive computer terminals. Services are available biweekly. Direct on-line access is available. Other services include workshops and printed guides on effective use of chemical nomenclature; computer processing guides; and photocopies of Russian journal articles.

Publications: The complete *Chemical Abstracts*, published weekly, is available by subscription for \$5,000 per year, including the Volume Indexes. The weekly issues or Volume Indexes alone may be obtained for \$4,850 per year. Back issues of most volumes are also available; prices vary. Collective Indexes covering five-year periods since 1957, and Decennial Indexes published between 1907 and 1956, are for sale separately. The latest Collective Index, the 9th (1972-1976), costs \$6,000. The entire set of abstracts and the collective indexes are also available in microform. *CA Selects*, a series of 80 biweekly current awareness publications on specialized topics, includes the subject *Animal Longevity and Aging*. A one-year subscription to this service costs \$60. The *CA Biochemistry Sections*, including Sections 1, 4, 13, 14, and 18, pertaining to animal health and disease, are also available as a separate biweekly publication, for \$300 per year (\$100 to members of the American Chemical Society). There are additional charges for

postage outside of the U.S.A. For information on additional publications, contact the Chemical Abstracts Service. **Availability of Products and Services:** Publications, magnetic tapes, and other services may be obtained from Chemical Abstracts Service, P.O. Box 3012, Columbus OH 43210, U.S.A. Prices, charges, and license fees vary. The *Chemical Abstracts* data base, CA SEARCH, is directly searchable on-line through various data base vendors, whose charges also vary. A catalog of information tools and services is available in English.

BIB-US-021

DEFENSE PEST MANAGEMENT INFORMATION ANALYSIS CENTER (DPMIAC)

United States. Armed Forces Pest Management Board
Walter Reed Army Medical Center
Washington DC 20012
U.S.A.

Contact: Ralph R. Carestia, Chief

Telephone: (202) 427-5365, 5366, or 5369

Mission and Function: The DPMIAC, established in 1962, acts as an information service for the Department of Defense in the field of pest management.

Types of Information Available: Published epidemiologic, laboratory, clinical, and statistical data are collected from worldwide bibliographic, research-in-progress, graphic, and microfiche information sources. The Center gathers information on the subjects of entomology, pest control, pesticides, toxicology, arthropod vectors of disease, and venomous organisms. The material is derived from secondary sources of information, in all languages.

Data Elements and File Size: Each stored bibliographic record contains descriptive cataloging data, subject descriptors, subject or category codes, biosystematic classification codes, abstracts, and names of sponsoring agencies or organizations. Records are stored in their original languages. On the average, twelve index postings are supplied for each record, selected from a fixed vocabulary. Records are accessible by subject. As of mid-1980, the data bank contained almost 97,000 records, dating from 1962 to the present. Approximately 3,500 records are processed each year, and are added to the data bank on a continual basis.

Processing Mode: Both manual and punched card methods are used for data processing and retrieval. Data are stored

in manual files, on punched cards, and in microforms.

Products and Services: Current and retrospective bibliographies are produced, and reference and selective dissemination of information services are available. Annotated bibliographies are produced quarterly and on demand. Consulting services are also offered.

Availability of Products and Services: Although the DPMIAC charges no fees, its services are available only to United States government agencies and their contractors and consultants. Descriptive material is available in English.

Future Plans: Plans are in progress to computerize the data bank, making it accessible via remote computer consoles on specific military installations.

BIB-US-022

EMERGENCY PROGRAMS INFORMATION CENTER DATA BANK (EPIC DATA BANK)

6505 Belcrest Rd.
Hyattsville MD 20782
U.S.A.

Contact: Edwin I. Pilchard, Principal Staff Officer, Scientific Resources

Telephone: (301) 436-8418
Telex: 89607

Parent Organization: United States. Department of Agriculture. Animal and Plant Health Inspection Service. Veterinary Services
Washington DC 20250
U.S.A.

Mission and Function: The mission of the EPIC Data Bank is to store and rapidly retrieve published information on economically important diseases of animals, especially infectious diseases foreign to the U.S.A. The data bank was established in 1973. It is linked to the Department of Agriculture's comprehensive data base, AGRICOLA, through which EPIC's Brucellosis Subfile is publicly accessible.

Types of Information Available: The computer data base contains citations and index terms to direct the system's users to complete documents stored on microfilm. Articles are read and indexed with selected code numbers and key words. Bibliographic data are collected from conventional and non-conventional published documents in all languages. All material in the data bank is derived from secondary

sources. Specific diseases monitored by EPIC are foot-and-mouth disease, hog cholera, trypanosomiasis, Venezuelan equine encephalomyelitis, Rift Valley fever, vesicular exanthema, San Miguel sea lion virus, Visna-Maedi disease, African swine fever, Newcastle disease, swine vesicular disease, bluetongue, vesicular stomatitis, ephemeral fever, rinderpest, pseudorabies, contagious equine metritis, akabane, fowl plague, East Coast fever, heartwater, and brucellosis. The subject scope of the data bank also includes vector entomology.

Data Elements and File Size: Data elements in each stored bibliographic record consist of descriptive cataloging data, subject descriptors, and subject category codes. Records are stored both in the original language and in English translation. On the average, 25 index postings are entered for each record, selected from EPIC's *Animal Disease Thesaurus*. Author, subject, geographic source, and year of publication indexes are provided. Entries are coded according to the *Animal Disease Thesaurus* code. There are 33,000 records currently in the data bank, increasing annually by 5,000 records. The earliest record in the system is dated 1826. The data bank is updated once a week.

Processing Mode: The EPIC Data Bank utilizes punched cards, computer batch processing, and computer on-line processing, on an IBM 370 computer, model 168, with a VS operating system. Both standard and System 2000 software packages are used.

Products and Services: Bibliographic products are generated by the data bank. They consist of computer printouts, microforms, magnetic tapes, published bibliographies, and selective summaries, which are delivered to users by telephone, mail, or via interactive computer terminals. Services are provided on demand.

Availability of Products and Services: Requests for services are accepted primarily from the U.S. Department of Agriculture, institutions of higher education, and agencies that are cooperating with the U.S. in animal disease control and eradication efforts. Non-USDA users are generally provided with citations only, rather than copies of the microfilmed documents. No fees are charged. Public access to the Brucellosis Subfile is made possible through AGRICOLA and its on-line vendors.

Future Plans: Plans for increasing the scope of subject matter covered by the data bank are under consideration.

BIB-US-023

ENVIRONMENTAL MUTAGEN INFORMATION CENTER (EMIC)

Oak Ridge National Laboratory
Bldg. 9224
P.O. Box Y
Oak Ridge TN 37830
U.S.A.

Contact: J.S. Wassom, Director

Telephone: (615) 574-7871; or FTS 624-7871
Telex: 810 572 1076 USDOE OKR

Parent Organization: United States. Department of Energy

Funding Organization: National Toxicology Program
P.O. Box 12233
Research Triangle Park NC 27709
U.S.A.

Mission and Function: The mission of the EMIC data bank is to collect, organize, and disseminate published information on genetic toxicology, including environmental mutagenesis and related areas. The data bank was established in 1969 and is currently in full operation. It is linked to the U.S. Department of Energy RECON and the National Library of Medicine TOXLINE data bases, and can be searched on these on-line systems.

Types of Information Available: The data bank compiles bibliographic data from published laboratory and clinical reports on genetic toxicology, including mutagenesis and such related areas as the effects of chemicals on DNA, meiosis, mitosis, DNA synthesis, and reproduction. Data are collected from source documents in all languages.

Data Elements and File Size: Data elements included in each stored bibliographic record consist of descriptive cataloging data, subject descriptors, subject or category codes, biosystematic classification codes, and abstracts. Records are stored both in the original language and in English translation. On the average, 20 index postings, selected from keywords and a fixed vocabulary, are entered for each record. Index entries are coded using EMIC accession numbers and Chemical Abstracts Service (CAS) Registry Numbers. The data are accessible by author, subject, publication source, type, and date. There were, in mid-1980, 30,000 records in the data bank, with 3,000 records added annually. The data bank is updated three times a month. Although records in the data bank date from as early as 1912, only the literature from 1969 to the present can be considered comprehensive.

Processing Mode: Punched cards, manual files, and batch and on-line computer processing are used to maintain EMIC. Proprietary software was developed for the system.

Products and Services: EMIC provides bibliographic searches and on-line access. Information products consist of computer printouts, indexes in microform, videotapes, and published periodicals, which are delivered to users by telephone and mail, and through interactive computer terminals. Output is provided on demand.

Publications: EMIC publications, a newsletter and an annual survey of the literature, are available from National Technical Information Service, 5285 Port Royal Rd., Springfield VA 22161, U.S.A.

Availability of Products and Services: The data bank can be queried via computer terminal, through the RECON and TOXLINE data bases, or by writing or calling the Center. Answers to specific questions are provided as time permits, on a reciprocal exchange basis. Descriptive material is available in English, French, German, Italian, Japanese, Serbo-Croatian, and Spanish.

BIB-US-024

**ENVIRONMENTAL TERATOLOGY INFORMATION CENTER
(ETIC)**

Oak Ridge National Laboratory
Bldg. 9224
P.O. Box Y
Oak Ridge TN 37830
U.S.A.

Contact: J.S. Wassom, Director

Telephone: (615) 574-0603; or FTS 624-0603
Telex: 810 572 1076 USDOE OKR

Parent Organization: United States. Department of Energy

Funding Organization: National Toxicology Program
P.O. Box 12233
Research Triangle Park NC 27709
U.S.A.

Mission and Function: The mission of the ETIC data bank, which was established in 1975, is to collect, organize, and disseminate information on the evaluation of chemical, biological, and physical agents for teratogenic activity in warm-blooded animals. The ETIC data bank is linked to and can be searched on the U.S. Department of Energy RECON and the National Library of Medicine TOXLINE systems.

Types of Information Available: Bibliographic data are gathered worldwide from published sources of laboratory and clinical data on animal and human teratology. Information is collected from journals and reports in all languages.

Data Elements and File Size: Data elements included in each stored bibliographic record consist of descriptive cataloging data, subject descriptors, subject or category codes, biosystematic classification codes, and abstracts. On the average, ten index postings are entered for each record, consisting of keywords and terms from a fixed vocabulary. Index entries are coded by ETIC accession numbers and Chemical Abstracts Service (CAS) Registry Numbers. Author, subject, publication source, language, and document type indexes are provided. Data are accessible by subject, author, publication source, date, document type, and CAS Registry Numbers. There were 19,000 records in the data bank in mid-1980, with 1,200 records added annually. The earliest record in the data bank is dated 1912; the most recent record is current. The data bank is updated three times a month.

Processing Mode: The data bank uses manual techniques, punched card methods, and batch and on-line computer modes for processing and retrieval. Data are stored in manual files and on magnetic tape. The system uses a software package developed in-house.

Products and Services: Retrospective bibliographies are generated and on-line access is provided. Information products consist of computer printouts, microforms, and published periodicals, which are delivered to users by mail, telephone, or interactive computer terminals. Services are provided on demand.

Availability of Products and Services: Service requests may be directed to the data bank on-line through RECON or TOXLINE or by writing or calling ETIC. Specific questions are answered on a reciprocal exchange basis, as time permits. Descriptive materials are available in English.

BIB-US-025

FISH DOCTOR CLINICAL CENTER, INC.

Fish Disease Clinic, Hospital, and Research Complex
P.O. Box 765
Brandon FL 33511
U.S.A.

Contact: Charles Dale Meryman, President

Telephone: (813) 626-1805

Mission and Function: The Fish Doctor Clinical Center's data bank was established in 1974 to collect aquatic animal medical information to support disease prevention, control, eradication, and identification efforts. In addition to its documents, slides, and preserved specimens, the Center's collection is noteworthy for its documents on rare tropical fish.

Types of Information Available: Bibliographic, research-in-progress, and numerical data and graphic materials are collected on fish disease, water chemistry, spawning, fish nutrition, and pharmacology. Approximately three-fourths of the material in the data bank is derived from primary published sources of epidemiologic data, laboratory and clinical data, statistics, economic data, and data on specimens. The remaining fourth of the material is derived from secondary information sources. The data bank's collection emphasizes material in German, Japanese, Russian, or English.

Data Elements and File Size: Bibliographic records are stored in both the original language and in translation. On the average, five index postings, consisting of keywords and terms from a fixed vocabulary, are entered for each record. Entries are coded by the Universal Decimal Classification. Author, subject, and title indexes are provided. There are currently 5,000 documents in the data bank, with 1,000 added annually on a monthly basis. Records date from the 1950's to the present.

Processing Mode: The data bank uses manual and punched card techniques for data processing and retrieval. Records are stored in manual files and on punched cards and microforms.

Products and Services: Current and retrospective bibliographies and selective dissemination of information services are provided. Information products, in the form of manually sorted punched cards, newsletters, and research reports are delivered to users personally or by mail. Services are normally provided on a monthly basis. Research and consulting services are also available.

Publications: The Fish Doctor Clinical Center offers copies of 38 selected fish and wildlife research publications by Charles Dale Meryman. A fee of \$2.00 per paper is charged to defray costs. A listing of these publications may be obtained from the Center.

Availability of Products and Services: Requests for services should be directed to Sharon Hoffman, Meryman Library of Aquatic Research, P.O. Box 765, Brandon FL 33511, U.S.A. Fees are charged for consulting services. Descriptive material is available in English.

BIB-US-026

HIERARCHICAL ENVIRONMENTAL RETRIEVAL FOR MANAGEMENT AND NETWORKING: WILDLIFE DATA FILES (HERMAN)

Biological Information Service
3319 Avalon St., No. 14
Riverside CA 92509
U.S.A.

Contact: Julie L. Moore, Bibliographer

Telephone: (714) 684-0441

Funding Organization: Julie Moore and Associates

Mission and Function: The HERMAN data bank was established in 1969 to provide a data base for current awareness and retrospective searches of the literature on wildlife species of North American and Holarctic regions.

Types of Information Available: The data bank contains bibliographic data from worldwide sources of information on wildlife species, biology, parasites, behavior, population, food distribution, and diseases. Epidemiologic and disease transfer data are collected from secondary information sources in all languages.

Data Elements and File Size: Data elements included in each stored bibliographic record consist of descriptive cataloging data and subject descriptors. Records are stored in English translation. On the average, four index postings, consisting of terms from the *Thesaurus of Sport Fish and Wildlife Descriptors*, are entered for each record. The data bank is accessible by subject and geographic terms, author, and species. Approximately 200,000 records had been stored in the data bank as of 1980; 4,500 are added annually on a biweekly basis. The records in the data bank date from 1929 through the present.

Processing mode: The data bank uses computer batch and on-line processing, through time leased on an IBM 370 computer. Records are stored in manual files and on magnetic tape and discs. Standard software packages are used.

Products and Services: Current and retrospective bibliographies are available in printout form. Selective dissemination of bibliographic data is also offered by means of a card service. These information products are delivered to users by mail. The producer of the data bank also provides indexing and abstracting services on a contract basis.

Availability of Products and Services: Requests for services are accepted by mail or telephone. Fees vary according to

subject matter and type of search (retrospective searches cost, on the average, \$50.00; current awareness profiles, \$128.50). Services are available to all. Descriptive materials are available in English.

Future Plans: The possibility of providing on-line access to the data bank is being investigated.

BIB-US-027

NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)

5285 Port Royal Rd.
Springfield VA 22161
U.S.A.

Telephone: (703) 487-4600
Telex: 89-9405 (U.S.A.); 64617 (International)

Parent Organization: United States. Department of Commerce
Washington DC 20230
U.S.A.

Mission and Function: Created in 1950 by an act of the U.S. Congress, the National Technical Information Service (NTIS) is a clearinghouse for U.S. and foreign government-sponsored scientific, technical, and engineering research reported by national and local government agencies, their contractors or grantees, and Special Technology Groups. NTIS channels technical reports, federal machine-processable data files, software, government-owned patents, and other information products to business and industry, educators, government, and the general public. Its bibliographic data file has been automated since 1964, and is searchable on-line through a number of vendors.

Types of Information Available: Bibliographic data on unpublished research reports and government-owned patents are collected in the fields of agriculture; atmospheric sciences; social sciences; biological and medical sciences; chemistry; earth sciences; engineering; physical sciences; and mathematical sciences. Although most input to NTIS is supplied in English by agencies of the U.S. government, NTIS is also concerned with increasing the availability of foreign technical information in the U.S. Its scope is therefore worldwide.

Data Elements and File Size: Stored bibliographic records of research reports include descriptive cataloging data; abstracts; contract, grant, or project numbers; ordering or availability information; and subject descriptors. These

data are stored in English. Records are indexed with terms derived from a series of specialized controlled vocabularies. On the average, 6 to 8 index postings are supplied for each record. Records are classified by COSATI (Committee on Scientific and Technical Information) categories, and are searchable by subject, personal or corporate author, contract or grant number, and NTIS order number indexes. Full-text access to bibliographic citations and abstracts is available through on-line vendors. As of early 1981, the automated data base contained approximately 750,000 records; over 1.2 million are in the total NTIS information collection. About 70,000 records are added to the data base annually, via biweekly updates.

Processing Mode: On-line and batch computer processing are used for input and retrieval. Data are stored on magnetic tape and disc.

Products and Services: Bibliographies of citations to government-sponsored research reports and abstracts of their contents may be obtained through the NTIS search service, or produced on-line by the user through the services of data base vendors. Magnetic tapes of the entire bibliographic data base may be leased. NTIS produces a comprehensive biweekly abstract journal and weekly Abstract Newsletters in 27 subject categories. Published searches, consisting of bibliographies on topics of general interest, are issued and updated irregularly. A biweekly selective dissemination of information service, Selected Research in Microfiche (SRIM), is available by subscription to those who wish to receive full-text microfiche copies of reports in a specific subject category. NTIS also provides document delivery service, whereby most materials cited in its data base or publications may be obtained in hard copy or microfiche.

Publications: *Government Reports Announcements and Index* is issued biweekly by NTIS. Subscriptions mailed to North American addresses cost \$275 per year; all other locations must pay \$375 per year. Cumulated indexes are available through a separate subscription, costing \$300 for one year, or \$400 for two years. Of the 27 Abstract Newsletters, one is concerned with *Agriculture and Food*, and one with *Medicine and Biology*. They are issued weekly; prices vary. For information about these publications, write: Subscriptions, National Technical Information Service, Springfield VA 22161, U.S.A.

Availability of Products and Services: NTIS products are available for sale to the public. Although NTIS was established by the U.S. government, it is required by law to be self-supporting, and to recover all of its costs from sales. Prices of its products and services vary, and may be charged to some credit cards. Frequent users may wish to establish deposit accounts. The NTIS bibliographic data file is also

made available for batch searching by several vendors and for direct on-line searching by Bibliographic Retrieval Services, Inc. (BRS); DIALOG Information Retrieval Service; and ORBIT, the System Development Search Service.

BIB-US-028

PREDATOR DATA BASE

Conservation Library
1357 Broadway
Denver CO 80203
U.S.A.

Contact: Kay Collins

Telephone: (303) 837-5995

Parent Organization: Denver Public Library
1357 Broadway
Denver CO 80203
U.S.A.

Funding Organization: United States. Fish and Wildlife Service
Denver Wildlife Research Center
Denver Federal Center CO 80225
U.S.A.

Mission and Function: The Predator Data Base was established in 1975 to collect published information on predator animals in the United States, particularly such species as coyote, wolf, fox, and raptors.

Types of Information Available: Bibliographic data are collected from secondary sources of epidemiologic, laboratory, clinical, statistical, and economic data on predators, prey management, ecology, biology, behavior, and techniques. Information, mostly in English, is collected nationwide.

Data Elements and File Size: On the average, four index postings are entered for each bibliographic record. In addition to subject index terms chosen from a thesaurus, author indexes are provided. Index entries are coded by accession number. The file is searchable by subject and author. There were 8,617 records in the data base as of mid-1980, with approximately 1,000 records added annually, through semi-annual updates. The earliest record in the data bank is dated 1851; the most recent record is current.

Processing Mode: Processing and retrieval are accomplished on-line, using IBM 3031 and 370 equipment. Records are

stored on magnetic tape and disc. Software packages were developed in-house.

Products and Services: Current and retrospective bibliographies are produced on demand, and selective dissemination of information service is available. Information products, consisting of computer printouts of literature search results, are delivered to users by mail; reference queries are answered by telephone. Literature location service is also available.

Availability of Products and Services: The Predator Data Base is made available to the public through the Conservation Library of the Denver Public Library. Requests for services are accepted by mail or telephone. A fee, based on the length of the search, is charged, but there are no other restrictions on availability of services. Descriptive material is available in English.

BIB-US-029

PRIMATE INFORMATION CENTER

Regional Primate Research Center
University of Washington
Seattle WA 98195
U.S.A.

Contact: Maryeva W. Terry, Manager

Telephone: (206) 543-4376

Parent Organization: University of Washington
SJ 50
Seattle WA 98195
U.S.A.

Funding Organization: National Institutes of Health. Division of Research Resources. Animal Resources Branch
Bethesda MD 20205
U.S.A.

Mission and Function: The mission of the Primate Information Center's data bank is to store and retrieve citations to scientific publications on nonhuman primates, including publications dealing with naturally occurring and experimental diseases. Established in 1963, the data bank is currently in full operation.

Types of Information Available: Bibliographic data are collected worldwide from citations to case reports and disease surveys in habitat and in captivity, and on experimentally produced diseases in nonhuman primates. Material

is derived from primary publications in all languages, although coverage of Slavic and oriental languages is limited. Behavioral, biological, and medical studies are included in addition to health and disease data.

Data Elements and File Size: Data elements for each stored citation include descriptive cataloging data, subject descriptors, and biosystematic classification codes. Records are stored in both the original language and English translation. Index entries are chosen from a fixed vocabulary and are coded according to a locally developed code. Author, subject, and geographic access to information is provided. There were 60,000 records in the data bank in mid-1980, with 4,000 records added annually. They date from 1940 to the present. The data bank is updated five times per week.

Processing Mode: The data bank uses computer batch and on-line processing and, for pre-1970 citations on edge-punched cards, needle-sorting techniques for data processing and retrieval. Records are stored on magnetic tape, disc, and edge-punched cards.

Products and Services: Retrospective bibliographies and selective dissemination of information (SDI) services are provided. Information products consist of computer printouts of citations, a published index journal, and bibliographies, which are delivered to users by mail. The published index journal is produced monthly; bibliographies are produced irregularly; and SDI services are offered bi-weekly. Retrospective file searches are performed as requested.

Publications: *Current Primate References*, a monthly index journal, costs \$30.00 a year for individuals and \$35.00 for institutions in the United States and Canada; and \$40.00 and \$45.00, respectively, elsewhere.

Availability of Products and Services: Services are available without restriction, for a fee. Prices for published, custom, and custom biweekly services range from \$15.00 to \$60.00. Descriptive information is available in English from the Center.

BIB-US-030

**REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES ONLINE
(RTECS ONLINE)**

National Library of Medicine
8600 Rockville Pike
Bethesda MD 20209
U.S.A.

Contact: Melvin Spann, Chief, Biomedical Information Services Branch

Telephone: (301) 496-1131

Telex: 710 824 9616

Parent Organization: National Institutes of Health

Mission and Function: The Registry of Toxic Effects of Chemical Substances Online has been operational for four years, to provide toxicological information to the scientific community. The data in the Registry are compiled by the National Institute for Occupational Safety and Health, which publishes them in hard copy and microfiche, and are made available on-line by the National Library of Medicine as a subfile of its MEDLARS (Medical Literature Analysis and Retrieval System) data base.

Types of Information Available: Epidemiologic, laboratory, and clinical data are collected from worldwide bibliographic sources and published numerical compendia on the toxic effects of chemical substances on animals, fish, and humans. Sources in all languages are covered.

Data Elements and File Size: The stored record for each substance contains descriptive cataloging information for the sources of human and animal toxicity data; subject descriptors; category codes; and numerical data, including threshold limit values, recommended standards in air, and aquatic toxicity. Records are stored in translation. On the average, as many as 100 index postings are associated with a unit record, consisting of keywords from the title or text of each source of toxicity data, as well as terms derived from a fixed vocabulary. Each substance is coded by Chemical Abstracts Service (CAS) Registry Number, Wiswesser Line Notation, synonyms, molecular formula, and molecular weight. RTECS is searchable as an inverted file. There were over 42,000 records in the data bank as of mid-1980, input since 1977 (source publication dates may be considerably older). Approximately 5,000 records are added annually, by means of quarterly updates.

Processing Mode: On-line and batch processing and retrieval are accomplished with an IBM 370/158 computer. Records are stored on magnetic tape. The MEDLARS system uses software developed in-house.

Products and Services: RTECS may be searched on-line. Selective dissemination of information service is also provided. Information products, in the form of computer printouts and magnetic tape available on demand, are distributed by mail and interactive computer terminals.

Availability of Products and Services: The RTECS Online file may be accessed directly by subscribers to the MEDLARS system. This access costs \$22.00 per hour

during the prime hours of 10:00 a.m. to 5:00 p.m. (Eastern Standard Time), and \$15.00 per hour during other times. Offline prints cost \$0.15 per page. The MEDLARS system can accommodate only a limited number of subscribers, so educational institutions and clinical groups are given preference. Descriptive materials are available in English. The published version of the *Registry of Toxic Effects of Chemical Substances* is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, U.S.A. Updated quarterly, it is available at \$26.00 per year for U.S. subscribers; and at \$32.50 outside the U.S.

Future Plans: It is expected that additional compounds will be added to the data bank, and that existing records will be expanded.

BIB-US-031

ROSE LAKE PATHOLOGY LABORATORY

Michigan. Department of Natural Resources. Rose Lake Wildlife Research Center
8562 E. Stoll Rd.
E. Lansing MI 48823
U.S.A.

Contact: Stephen M. Schmitt

Telephone: (517) 373-9358

Mission and Function: The Rose Lake Pathology Laboratory data bank was established in 1933 to support the Wildlife Research Center in its efforts to monitor, control, and prevent disease in Michigan wildlife.

Types of Information Available: The data bank contains bibliographic, research-in-progress, and laboratory diagnostic data as well as photographs and graphic materials on health and disease of wildlife in Michigan. Although some of the material in the data bank is derived from the Laboratory's own records (about 10 percent), most is derived from published sources of information in English, primarily reprints from national and international wildlife agencies.

Data Elements and File Size: Stored bibliographic records include descriptive cataloging data, subject descriptors, and abstracts. An average of three index postings, consisting of keywords from text or title, are entered for each record. Access to stored records is provided by subject and author indexes. The Laboratory's necropsy reports contain information on the origin of the animal, the date and condition (dead or alive) of receipt, tests, and diagnosis. These records

are accessible by species and case number. Records of research undertaken for the state's field biologists are also included in the data bank. Representative research projects include special examinations of waterfowl for lead content, and studies of feed contamination.

Processing Mode: Records are stored and retrieved manually. Some records are stored on microforms.

Products and Services: The data bank offers current file searches and a printed bibliography of publications. Products are delivered to users by mail.

Publications: A bibliography of Wildlife Pathology Laboratory publications and reprints of the cited articles are available from the Laboratory.

Availability of Products and Services: Requests for services should be directed to the Laboratory by telephone or by mail. No fees are charged, and information services are available to all.

BIB-US-032

SCIENCE CITATION INDEX (SCI)

Institute for Scientific Information
3501 Market St., University City Science Center
Philadelphia PA 19104
U.S.A.

Contact: Susan M. Deutsch, Director, Communications

Telephone: (215) 386-0100, ext. 1333 or 1334

Telex: 84-5305

Cable: SCINFO

Mission and Function: *Science Citation Index* was established in 1961 to provide access to the journal and non-journal literature in over 100 disciplines in science and technology. As a citation index, SCI identifies and groups together all newly-published items that have referenced the same earlier work. The cited document thus becomes an indexing term used to retrieve current papers on the same subject. The automated data bank, SCISEARCH, is publicly available on-line through the DIALOG Information Retrieval Service, as Files 34 and 94, and through BRS.

Types of Information Available: Bibliographic data are collected entirely from worldwide sources of primary published literature in all languages. Subjects include environmental sciences, engineering, technology and applied sciences, agricultural sciences, medical and life sciences, physical and chemical sciences, and behavioral sciences.

Data Elements and File Size: Stored bibliographic records contain descriptive cataloging data; contract, grant, or project numbers; and sponsoring agencies or organizations. Records are stored in English translation. Documents are indexed with an average of eight keywords from the title. In addition, each reference cited by the source document also becomes an indexing term. On the average, 15 such citations are indexed for each source document. Data are accessible by subject; by corporate source, arranged geographically; by author of the source item; and, in the citation index, by cited references. Records in the data bank date from 1961 to the present. Over 6 million documents have been processed, as of 1980. Approximately 600,000 records are added annually, through weekly updates.

Processing Mode: Data processing and retrieval are accomplished with on-line computers: IBM 370/148 and IBM 370/145 mainframes, as well as IBM 3330 and 3420 models. Data are stored on magnetic tape and direct access storage devices. Standard software is used.

Products and Services: Current and retrospective bibliographies may be produced in addition to statistical analyses; selective dissemination of information services are available. On-line access is also provided. In addition to the printed index journal, information products may be obtained in the form of computer printouts and magnetic tape, delivered by mail or interactive computer terminal. Output is available weekly. Document delivery services are also provided.

Publications: *Science Citation Index* is published bimonthly and cumulated annually. Back issues and two 5-year cumulative indexes (1965-1969 and 1970-1974) are also available. Annual subscriptions, costing \$4,500 per year, include the citation index, the source index, corporate index, and the Permuterm subject index. *Current Contents* is a weekly publication that displays tables of contents from the world's scientific and technical journals and from multi-authored books. One of the seven multidisciplinary editions of *Current Contents* is devoted to journals in the fields of Agriculture, Biology, and Environmental Sciences. A subscription costs \$190 per year. Since 1978, the Institute for Scientific Information has published the *Index to Scientific and Technical Proceedings*, a monthly index of published conference proceedings and the individual papers contained in the proceedings. Cumulated semiannually, ISTP costs \$500 per year.

Availability of Products and Services: Products and services, ranging from individual document fulfillment services to magnetic tape services, are available to all from ISI, 3501 Market St., Philadelphia PA 19104, U.S.A. Fees are charged for all services; the weekly magnetic tape service is the most expensive, at \$10,000 per year. Users may con-

duct their own on-line searches of the SCISEARCH data base through the DIALOG Information Retrieval Service or BRS, for an hourly fee plus unit charges for printed records. Subscribers to the printed *Science Citation Index* are given access to the on-line file at reduced rates. Descriptive material is available in English from ISI.

BIB-US-033

TOXICOLOGY DATA BANK (TDB)

National Library of Medicine. Toxicology Information Program
8600 Rockville Pike
Bethesda MD 20209
U.S.A.

Contact: Melvin L. Spann, Chief, Biomedical Information Services Branch

Telephone: (301) 496-1131

Parent Organization: National Institutes of Health

Mission and Function: The Toxicology Data Bank provides physical and chemical, pharmacological, economic, manufacturing, and occupational data and factual information concerning human and non-human toxicity of chemicals and drugs to the public, the government, and private organizations. Although the data bank contains information on veterinary drugs and their effects on domestic animals, its primary focus is on toxicological effects of chemicals as they relate to man. All data have been evaluated by a peer review committee of scientists. The data bank was established in 1974. It is a subfile of the National Library of Medicine's MEDLARS (Medical Literature Analysis and Retrieval System) data base.

Types of Information Available: The major portion of the factual textual data in the data bank is derived from tertiary sources (handbooks, monographs, textbooks, and the like), although approximately 20 percent of the data may have been derived from secondary published sources. Most of the sources of toxicology data are national, but this is not a requirement of the system. Most of the animal studies reported in the data bank generally have been performed to evaluate potential hazards to humans, although the data bank may contain data on hazards to domestic and wild animals, and may deal with some veterinary drugs.

Data Elements and File Size: Unit records contain such information as the substance's Chemical Abstracts Service (CAS) Registry Number, synonyms, name fragments, molecular formula, molecular formula fragments, and Wiswesser Line Notation; human and animal toxicity excerpts, interaction excerpts, and laboratory methods excerpts; animal toxicity keywords, human toxicity keywords, and interactants; toxicity values, minimum fatal dose, maximum daily intake, threshold limit values, and maximum daily dose; pharmacology and toxicology data, including absorption, distribution, excretion, metabolism, poisoning potential, antidote and treatment, pharmacotherapy, therapeutic uses, warnings and cautions, idiosyncracies, therapeutic index, tolerance and resistance, and mechanism of action; environmental information, including occupational exposure and limits, pollution potential, fire potential, explosive limits, radiation limits, shipment methods, and disposal methods; manufacturing data, including major uses and manufacturers; and chemical and physical properties, including boiling point, density or specific gravity, color, flash point, melting point, molecular weight, solubility, spectral properties, stability and shelf life, and vapor pressure. Many of these fields are directly searchable, since the data bank is accessible as an inverted file. The animal and human toxicity fields are also indexed with terms taken from a fixed vocabulary: *Medical Subject Headings* (MeSH). There are approximately 2,500 substances in the file; 1,000 are added annually. The data bank is updated about four times each year.

Processing Mode: Data are processed and retrieved by computer batch and on-line operation; data are stored on disc. TDB employs the hardware and software of the National Library of Medicine's ELHILL computer facility.

Products and Services: Reviewed data and information on chemical substances may be obtained; selective dissemination of information service and on-line access are provided. Information, in the form of computer printouts, is delivered to users by mail or interactive computer terminals. **Availability of Products and Services:** TDB may be accessed directly by approved MEDLARS users. Codes and training for the use of this system may be obtained from Regional Medical Libraries. From 10:00 a.m. to 5:00 p.m. (Eastern Standard Time), access costs \$22.00 per hour. At all other times, access costs \$15.00 per hour. Off-line printouts cost \$0.15 per page. Descriptive materials are available in English.

BIB-US-034

TOXICOLOGY INFORMATION ON-LINE (TOXLINE)

National Library of Medicine
8600 Rockville Pike
Bethesda MD 20209
U.S.A.

Contact: Melvin Spann, Chief, Biomedical Information Services Branch

Telephone: (301) 496-1131
Telex: 710 824 9616

Parent Organization: National Institutes of Health

Mission and Function: TOXLINE, established to provide toxicological bibliographic citations to the scientific community, is in its seventh year of operation. It is a subfile of the National Library of Medicine's MEDLARS (Medical Literature Analysis and Retrieval System) data base.

Types of Information Available: Worldwide bibliographic data are collected from published secondary sources, in all languages, of human and animal toxicity studies, effects of environmental chemicals and pollutants, adverse drug reactions, and analytical methodology. Research-in-progress reports from U.S. government-sponsored projects are also included.

Data Elements and File Size: Stored bibliographic records contain descriptive cataloging data; subject descriptors; abstracts or project summaries; contract, grant, or project numbers; sponsoring agencies or organizations; and Chemical Abstracts Service (CAS) Registry Numbers. Records are stored in English translation. Approximately ten index postings are supplied for each document, derived from keywords from the document's title or text. Chemical substances may be searched by CAS Registry Number, trade name, or synonyms, after consulting the related MEDLARS CHEMLINE file. Bibliographic data may be retrieved by author or subject. Since the data base is searchable as an inverted file, most elements of each record may be access points. Records date from around 1940 to the present. Approximately 390,000 citations were searchable on-line as of mid-1980, with twice that number in the TOXBACK 65 and TOXBACK 74 backfiles, searchable in batch mode. The file grows at an annual rate of 140,000 records, added through monthly updates.

Processing Mode: Processing and retrieval are accomplished by computer, in batch and on-line modes. Data are stored on magnetic tape. MEDLARS uses an IBM 370/158 computer, with software developed in-house.

Products and Services: Users may conduct their own bibliographic searches using the on-line interactive system, and may also store and run their own selective dissemina-

tion of information (SDI) searches. The National Library of Medicine will also run SDI searches on a monthly basis for TOXLINE users. Search results are delivered by mail or interactive computer terminals.

Publications: The *Toxicology-Epidemiology Research Projects Directory* may be purchased from the National Technical Information Service, Springfield VA 22161, U.S.A.

Availability of Products and Services: TOXLINE is accessible as a subfile of the MEDLARS system, to which users may subscribe or which users may contact through approximately 800 academic, commercial, and government subscribing organizations. TOXLINE searches cost \$35.00 per hour during prime hours (10:00 a.m. through 5:00 p.m., Eastern Standard Time), and \$28.00 per hour during other hours. Off-line prints cost \$0.27 per page. Since there is a limited number of subscribing institutions, educational and clinical institutions are given priority. Descriptive material is available in English.

BIB-US-035

VETERINARY REFERENCE SERVICE (AVP UPDATE)

American Veterinary Publications
Drawer KK
Santa Barbara CA 93102
U.S.A.

Contact: J. F. Smithcors, Editor

Telephone: (805) 963-6561

Mission and Function: The Veterinary Reference Service was founded in 1960 to provide veterinary practitioners with abstracts of clinically oriented veterinary literature from the U.S. and selected publications worldwide.

Types of Information Available: Worldwide bibliographic data on animal health and disease are derived entirely from published sources—over 500 research journals. Although English-language sources predominate, German and French literature is also included. Epidemiologic data, laboratory and clinical data, statistics, economic data, medical and surgical case reports, and technics are covered.

Data Elements and File Size: Each stored bibliographic record contains descriptive cataloging data, including author affiliation; subject descriptors; and structured, informative abstracts. On the average, two index postings, consisting of keywords derived from the title or text, are

supplied for each document. Records are accessible by subject. There were approximately 20,000 records in the file in mid-1980, dating from 1960 to the present. Approximately 1,500 records are added annually, via quarterly updates.

Processing Mode: Processing, retrieval, and record storage are accomplished manually.

Products and Services: Current and retrospective bibliographies are provided on request and delivered to users by mail.

Publications: The Veterinary Reference Service monthly abstracting publication, *Update*, is available in a Pet Practice edition, a Large Animal edition, or Combined edition. The Pet Practice and Large Animal editions cost \$92.50 each; the Combined edition, \$160.00. *Update* is issued in loose-leaf form, with an annotated monthly index and cumulative quarterly index.

Availability of Products and Services: Information retrieval service is available without charge to individual subscribers, and to commercial firms for a fee that varies with the amount of time involved. For information, write or call the Editor. Descriptive material is available in English.

Yugoslavia

BIB-YU-036

EDVARD KARDELJ'S UNIVERSITY OF LJUBLJANA. SCHOOL OF VETERINARY SCIENCE

Gerbiceva 60
P.O.B. 25
61115 Ljubljana
Yugoslavia

Contact: Head of the School

Telephone: (061) 261-182; 261-664; or 261-560

Parent Organization: Edvard Kardelj's University of Ljubljana. Biotechnical Faculty. Indok Service
Krekov trg 1
61000 Ljubljana
Yugoslavia

Funding Organization: Research Council of Slovenia
38-IV, Riharjeva
61000 Ljubljana
Yugoslavia

Mission and Function: The University of Ljubljana Veterinary School's data bank supplies veterinary information to the Indok Service for Biotechnics of the Biotechnical Faculty of the University, and serves as the Veterinary Library for the Socialist Republic of Slovenia. Its bibliographic data have also been published in *Biomedicina Slovenica*, the abstract journal of the Institute for Biomedical Informatics of the Faculty of Medicine of the University of Ljubljana.

Types of Information Available: Bibliographic, research-in-progress, and numerical data are collected from published sources of information on regional animal health and disease topics, veterinary public health, food hygiene, husbandry, game-keeping and diseases of wild animals, pisciculture and diseases of fish, apiculture and diseases of honeybees, and management of livestock wastes. Nearly all of these epidemiologic, laboratory, clinical, and statistical data are derived from secondary sources in all languages.

Data Elements and File Size: Stored bibliographic records may contain descriptive cataloging data, subject descriptors, subject codes, abstracts, project summaries, identification of sponsoring agencies or organizations, and numerical data. Records are stored both in the original language and in translation. On the average, three index postings per record are supplied. Author and subject access to bibliographic data is provided. Records that are to be included in *Biomedicina Slovenica* are coded by the Universal Decimal

Classification. There were, in 1980, approximately 800 records in the data bank, dating from 1958 to the present. Approximately 80 records are processed each year, during the course of five updates.

Processing Mode: Data are processed, stored, and retrieved manually.

Products and Services: Current and retrospective bibliographies are prepared on demand, and selective dissemination of information is provided on an irregular basis by means of a card service. *Slovene Veterinary Bibliographic Data*, an abstracting and indexing journal issued irregularly, is the principal information product of the data bank.

Publications: *Slovene Veterinary Bibliographic Data* is available from the School of Veterinary Science. The school has also produced the Veterinary Issue of *Research Reports* of the Faculty of Biotechnics of the University of Ljubljana, from 1968 to the present. This publication will be made available in exchange for other suitable publications; write for details.

Availability of Products and Services: Services are available without restriction, upon informal request. Fees are charged only for photocopies.

Future Plans: Further affiliation with both the Indok Service and the Institute for Biomedical Informatics is planned.

For other data banks containing bibliographic data, see entries EPI-GE-045, EPI-UK-049, LAB-FR-071, RES-US-109, and RES-US-111.

EPIDEMIOLOGIC DATA BANKS

Australia

EPI-AU-037

AUSTRALIAN NATIONAL ANIMAL DISEASE INFORMATION SYSTEM (ANADIS)

Australia. Department of Primary Industry. Bureau of Animal Health
Broughton St.
Barton, Canberra, A.C.T.
2600 Australia

Contact: R. T. Roe

Telephone: Canberra 062-725363

Mission and Function: ANADIS is being designed as an integrated animal disease survey and monitoring system on a national scale, to support the Australian Bureau of Animal Health's comprehensive epidemiological service. Still in the developmental stage, ANADIS is being implemented in phases, the first of which is designed to assist in the daily management of the brucellosis eradication campaign. Its objectives are to provide veterinary staff with comprehensive information on the history and current status of the herds under their supervision; to assist field staff in planning and in scheduling herds for serological testing; to provide administrative veterinarians with reports on the progress of the brucellosis eradication campaign; and to establish a method for monitoring the progress of the eradication effort at the regional, state, and national levels.

Types of Information Available: Diagnostic or confirmatory laboratory data are collected directly by each of the 18 veterinary diagnostic laboratories in Australia. Data are limited to national brucellosis incidence.

Data Elements and File Size: Seven types of data are recorded by means of individual computer programs: OWN-

ER records property identification data including name, address, and telephone number of farm owners and managers, location of the property, and identification of the testing team; HERDTEST summarizes results of all serological tests conducted on a herd; TRACEBACK records abattoir monitoring test data in the form of tailtag number (i.e., herd identification number) plus results; MILKRING enters the results of milk ring tests; VACCINATE records the vaccinations performed in a herd; SETSTATUS is used to calculate the brucellosis status of each herd; and SETSIZE records the number of breeders in each herd, from HERDTEST results. Data are indexed so that all herds in a region may be accessed numerically by registration number or alphabetically by owner name.

Processing Mode: ANADIS is a decentralized data bank. Each of the 18 laboratories has a NOVA 3-12 minicomputer, and keys data directly onto discs. Input data are copied onto floppy discs which are mailed to the Bureau of Animal Health. The Bureau uses a larger computer to consolidate the records on magnetic tape, and also retains backup copies of the discs. Software, developed specifically for ANADIS, is interactive, prompting data entry and rejecting inconsistent information. Each laboratory's equipment has the capacity to store information for all herds in the region for at least 15 months. Older data are stored by the Bureau.

Products and Services: Printouts of herd histories and statistical reports on eradication activities are produced automatically or on demand by each laboratory. Statistical analyses and major reports are produced by the Bureau. The system has separate report-generating programs: HERDREPORT produces the most commonly printed report, the Herd Brucellosis Summary, after herd testing and whenever any other test results suggest infection in a herd; ACTIVITY generates herd testing activity statistics for specific districts, regions, or periods of time; STATUS produces the Herd Brucellosis Status report in the form of a matrix showing the numbers of herds whose brucellosis status changed during the specified time period; and ACTIONLIST provides lists of herds that satisfy specified

criteria, such as those due to be scheduled for retesting or those that have not fulfilled monitoring or vaccination requirements.

Availability of Products and Services: The system is intended to serve the staff of the Bureau of Animal Health and the veterinary diagnostic laboratories. However, consolidated information from ANADIS will be made available to agencies of other national governments on request.

Future Plans: Incorporation of other laboratory examination and diagnostic data, as well as information collected from abattoir and field surveys, should establish ANADIS as a disease surveillance system that will include both periodic broad surveys and continuous monitoring of the disease situation in the intervening periods. This will permit the Bureau of Animal Health to investigate the productivity of animals in herds and in flocks, to study the occurrence and epidemiologic behavior of disease agents that may influence various components of productivity, and to obtain information on disease conditions that fluctuate in importance and conditions that emerge or change substantially in importance over time.

Brazil

EPI-BR-038

INFORMATION SYSTEM FOR VESICULAR DISEASE SURVEILLANCE (IS-PAFMDC)

Pan American Foot-and-Mouth Disease Center
C.P. 589, ZC 00
Rio de Janeiro — RJ
Brazil

Contact: Raul Casas Olascoaga, Director

Telephone: 771-3128-33
Telex: (021) 30253 CPFA
Cable: PANAFTOSA RIO DE JANEIRO — Brazil

Parent Organization: Pan American Health Organization
525 23rd St., N.W.
Washington DC 20037
U.S.A.

Mission and Function: The Information System for Vesicular Disease Surveillance is responsible for retrieval of information on vesicular disease occurrence in each country

of Latin America and the Caribbean, and for continental epidemiologic surveillance. The data bank was established in 1973.

Types of Information Available: Numerical and locational data are derived from maps and other primary sources of regional epidemiologic data, laboratory and clinical data, statistical data, economic data, and animal population data. Information on foot-and-mouth disease control activities is also within the scope of the system.

Data Elements and File Size: Stored records contain numerical data organized by subject or category codes. Records are indexed by variable; and on the average, one index posting is supplied per record. Index entries are coded by the Universal Decimal Classification. Records are retrievable by geographic location and by variable. The data bank contained 185,600 records in late 1980, dating from June 1972 to the present. Approximately 117,000 records are processed each year, through weekly updates.

Processing Mode: The system employs both punched cards and an on-line computer for processing and retrieval, and uses disc storage. Hardware includes one Digital PDP 11/34 computer; two LA 36-CE decwriters; one mark sense card reader; and other peripheral equipment. Software was developed within the organization and is available for outside use.

Products and Services: Statistical analyses are provided, and searches for current and retrospective data are conducted. Direct on-line access is also available. Printouts are supplied to users by mail or interactive computer terminal. The system also produces printed periodical reports consisting of numerical compendia of epidemiologic surveillance data. Output services are offered weekly, monthly, annually, and on request.

Availability of Products and Services: Contact Panaftosa by telex for information services. No fees are charged, but services are restricted to national foot-and-mouth disease programs; official animal health services; and internal units of Panaftosa.

Future Plans: Mathematical models may be added to the output of the system, and coverage may be extended to other animal diseases.

Colombia

EPI-CO-039

INSTITUTO COLOMBIANO AGROPECUARIO. OFICINA DE PROGRAMACION Y EVALUACION

Calle 37, No. 8-43, Oficina no. 416
Apartado Aereo No. 7984
Bogota
Colombia

Contact: Jose Ignacio Paredes, Director

Telephone: 2322031, or 2855520, ext. 227

Mission and Function: The Oficina de Programacion y Evaluacion plans and evaluates animal health projects undertaken to control animal disease in Colombia. Although its automated data bank is still in the planning stage, the Oficina contributes animal health data to and evaluates data for the Office International des Epizooties and the Pan American Foot-and-Mouth Disease Center, and supplies the directors of the Biblioteca Agropecuaria de Colombia and the Oficina de Programacion del Sector Agropecuario (OPSA) with the data that these agencies of the Colombian government require.

Types of Information Available: Numerical and graphic data are collected on the epidemiology of animal health and disease, laboratory and clinical findings, statistics, and economic aspects of animal disease in Colombia. All data are derived from primary sources in Spanish.

Data Elements and File Size: Stored records contain numerical data coded by biosystematic classification. Records are retrievable by variable.

Processing Mode: The data bank employs manual methods and computer batch processing for data handling. Records are stored in manual files and on magnetic tape.

Products and Services: Information retrieval services include searches of the current file, retrospective searches, and statistical analyses. Compiled data are issued through printed bulletins, and are delivered to users by telephone, mail, or teletypewriter printout. Services are provided on a weekly, monthly, annual, and irregular basis.

Availability of Products and Services: Data requirements should be submitted to the Director in writing. No fees are charged, and services are not restricted to any particular user groups. Descriptive material is available in Spanish.

Denmark

EPI-DK-040

DANISH VETERINARY SERVICES

Denmark. Veterinaerdirektoratet
21 Frederiksgade
DK — 1265 Copenhagen K
Denmark

Contact: Erik Stougaard, Chief Veterinary Officer

Telephone: (01) 11 48 88

Telex: 22 4 73

Cable: VETDIREK

Mission and Function: The Danish Veterinary Services compile statistical information on the national animal disease situation, with emphasis on bovine tuberculosis, brucellosis, enzootic leukosis, and paratuberculosis; on visna maedi in sheep; and on salmonellosis in all domestic animals.

Types of Information Available: The various departments of the Danish Veterinary Services compile numerical epidemiologic, laboratory, and clinical data on animal disease in Denmark. All data are derived from primary sources.

Data Elements and File Size: Records include tallies, by county, of the number of herds with suspected and confirmed cases of a particular disease, as well as comparative and year-to-date figures. Records date from 1969 to the present.

Processing Mode: Data processing, retrieval, and storage are manual operations.

Products and Services: Statistical analyses of the data are tabulated monthly, quarterly, and annually. These information products are delivered to users by mail.

Publications: *Arsberetning fra Veterinaerdirektoratet*, the annual report of the Danish Veterinary Services, containing summarized data, is available on request.

Availability of Products and Services: Data are made available to agencies of other governments, to which no fees are charged. Inquiries should be addressed to Erik Stougaard, Chief Veterinary Officer.

Ecuador

EPI-EC-041

PROGRAMA NACIONAL SALUD ANIMAL. DEPARTMENT OF EPIDEMIOLOGY
(PNSA — EPIDEMIOLOGY)

Ecuador. Ministerio de Agricultura y Ganaderia. Programa Nacional Salud Animal

ANIMAL HEALTH AND DISEASE DATA BANKS

P.O. Box 108, Min. Agricultura
Guayaquil 1740
Quito
Ecuador

Contact: G. M. Izurieta, Director PNSA

Telephone: 517400 — 212899

Mission and Function: The Department of Epidemiology's data bank was established in 1974 to store and analyze statistics on such animal diseases as foot-and-mouth disease, brucellosis, and rabies. The Department supplies analyzed statistical data to the Pan American Foot-and-Mouth Disease Center.

Types of Information Available: Bibliographic, numerical, and graphic data are collected on epidemiological and statistical aspects of animal health, animal disease, and ecology in Ecuador. Most of the material in the data bank (70 per cent) is obtained from primary sources in Spanish, English, French, and Portuguese; the remainder is derived from published secondary sources.

Data Elements and File Size: Stored bibliographic and original records contain subject descriptors and abstracts. They are indexed by keywords from the title or text of the document or report. Data are accessible by subject or geographic terms.

Processing Mode: Manual techniques and punched card methods are used for processing and retrieval. Data are stored in manual files, on punched cards, and in published form.

Products and Services: Statistical analyses of the current file are performed. Information products, available on manually sorted punched cards, are delivered to users by mail. Services are provided on a weekly, monthly, and annual basis. The Department of Epidemiology also offers analytical and investigative services.

Availability of Products and Services: Services are generally available to all requesters. Fees, if any, depend on the type of service requested. Descriptive material is in Spanish.

Future Plans: Plans for the introduction of computer processing are being considered.

France

EPI-FR-042

BULLETIN EPIDEMIOLOGIQUE MENSUEL SUR LA RAGE EN FRANCE

(B.E.M. RAGE)

France. Centre National d'Etudes sur la Rage
B.P. 9
54220 Malzeville
France

Contact: Louis Andral, Directeur

Telephone: (16) (83) 29 26 08
Cable: CNER BP 9 54220 MALZEVILLE

Funding Organization: France. Ministere de l'Agriculture.
Service Veterinaire

Mission and Function: The *Bulletin Epidemiologique Mensuel sur la Rage en France* has been issued since 1968 for the purpose of collecting and disseminating data on rabies cases occurring in French territory, with details of the locations involved, and species and sex of the animals affected.

Types of Information Available: Numerical epidemiological data are collected from primary reports on the incidence of rabies in France.

Data Elements and File Size: Stored numeric records contain biosystematic classification codes. There were approximately 18,000 records in the data bank in mid-1980, dating from 1968 to the present. The data bank grows at the rate of approximately 3,000 records per year, added through monthly updates.

Processing Mode: Computer batch processing and standard software packages are used to operate and maintain the system. Data are stored on magnetic tape.

Products and Services: Current and retrospective file searches are offered. Search results, available in the form of the monthly published *Bulletin Epidemiologique* or magnetic tapes, are delivered to users by mail.

Availability of Products and Services: Subscriptions to the *B.E.M.* may be obtained on request. No fees are charged; no restrictions are placed on the availability of services.

EPI-FR-043

CONTINUOUS ECO-PATHOLOGICAL SURVEY IN SUPERVISED RUMINANT HERDS (ENQUETE ECO-PATHOLOGIQUE CONTINUE) (E.E.P.C.)

France. Institut National de la Recherche Agronomique.
Laboratoire d'Eco-Pathologie

C.R.Z.V. de Theix
63110 Beaumont
France

Contact: M. Brochart, Directeur de Recherches

Telephone: (73) 92 42 63
Telex: INRATEX 990 227 F

Funding Organization: France. Institut National de la
Recherche Agronomique
149, rue de Grenelle
75341 Paris Cedex 07
France

Mission and Function: The mission of the E.E.P.C. is to study the inter-relationship between environment and pathology of ruminants; i.e., to study the processes and factors linked with disease and to develop prophylactic strategies in combatting diseases of ruminants; to perform economic assessments of ruminant disease; and, in the long run, to establish a preventive veterinary network. The data bank was established in 1977.

Types of Information Available: Numerical epidemiologic, laboratory, clinical, and statistical data are collected, concerning cattle herds on more than 100 farms scattered throughout France. Bi-monthly occurrences of specific diseases are recorded and correlated with such environmental factors as weather conditions, soil conditions, animal feeding practices, herd management, and farm structure. Data are collected from individual farmers, veterinarians, associations and regulatory bodies, and other government agencies. Approximately 80 percent of the data are derived from these primary sources; the remaining 20 percent, from secondary sources.

Data Elements and File Size: Stored records, organized by subject descriptors and by subject or category codes, contain numerical data. The data bank is updated irregularly: continuously collected data include veterinary treatments of various categories of animals (e.g., dairy cows, heifers, bulls, or calves); symptoms, diagnoses, mortalities, and disposals; composition of feed given each category of animal; calvings and artificial inseminations; decline in milk production among morbid cattle; and laboratory analyses performed on milk. Data on farming, including herd management and disease prevention methods, are collected annually.

Processing Mode: Batch and on-line computer processing are accomplished with an IRIS 80 computer. Data are stored in manual files and on magnetic tape and disc. The SOCRATE database management system, developed by

CII Honeywell-Bull, is used. It permits the data bank to be consulted by SOCRATE specialist users through an inquiry language, and by non-specialist users through a macro language. Intermediate files consisting of data to be analyzed may be created, then read and processed by GENSTAT statistical software.

Products and Services: Retrieval services include current and retrospective file searches, statistical analyses, and on-line access. Information products consist of computer printouts and magnetic tape, generated on demand. Information is delivered to users by telephone, mail, and interactive computer terminal.

Availability of Products and Services: Consult the Laboratoire d'Eco-Pathologie for information on access to the E.E.P.C. data. No fees are charged.

Future Plans: Plans to expand the system by adding more districts, more farms, and more cows are under consideration.

Germany (Federal Republic)

EPI-GE-044

SALVET

Germany (Federal Republic). Bundesgesundheitsamt
Thielallee 88-92 — Postfach
1000 Berlin 33
Federal Republic of Germany

Contact: The Director

Telephone: 030-83082681

Mission and Function: The SALVET data bank collects information concerning the distribution of salmonella infections among animals, in foods of animal origin, and in feedstuff in the Federal Republic of Germany. The data bank was established in 1977.

Types of Information Available: Epidemiologic data are collected from case reports and research-in-progress reports regarding salmonella infections of animals, salmonella type, and other factors involved in the spread of the disease. Only national data are collected.

Data Elements and File Size: Stored records contain numerical data indexed by variables. On the average, approximately 10 index postings are used for each record. The data bank contained 42,000 records in mid-1980, dating from

January 1977 to the present. Approximately 12,000 records are processed annually through monthly updates.

Processing Mode: A Siemens 7738 computer, in both batch and on-line modes, is used for processing and retrieval. Data are stored on magnetic tape and disc. The system uses both standard and in-house software packages.

Products and Services: Both current and retrospective file searches are performed on request. Search results are produced on computer printouts or displayed on a screen for in-house on-line users; results are conveyed to other users by telephone or mail.

Availability of Products and Services: Requests for information on salmonella incidence may be submitted to the Director. No fees are charged.

EPI-GE-045

VIRUS DATA BANK (VIRDB)

World Health Organization. Collaborating Centre
Koeniginstr. 49
8000 Munich 22
Federal Republic of Germany

Contact: Peter A. Bachmann

Telephone: 089 2180 2155, or 2531

Parent Organization: World Health Organization

Funding Organization: Germany (Federal Republic).
Bundesministerium fuer Jugend, Familie, und Gesundheit
Bonn
Federal Republic of Germany

Mission and Function: The Virus Data Bank has as its mission the collection and evaluation of data on animal viruses. Established in 1979, the data bank is still in the stage of pilot operations.

Types of Information Available: The data bank contains bibliographic data, research-in-progress data, and numerical data on characteristics of animal viruses. Approximately 90 percent of these worldwide epidemiologic, laboratory, and clinical data are derived from primary published sources; the remaining 10 percent from secondary sources. The data bank collects material in all languages.

Data Elements and File Size: Each record, stored both in the original language and in German translation, contains descriptive cataloging data, subject descriptors, and numerical data. Records are indexed with keywords from the title or text of the report and according to organized categories of variables. Index entries are coded by the Universal Decimal Classification. Data are accessible by subject. Annual updates of the data bank are planned. It currently contains records dating from 1977 to the present.

Processing Mode: The data bank utilizes on-line computer processing, with Cyber C65 and Siemens 6610 hardware. Data are stored on magnetic tape, disc, and microfiche. Software packages, developed within the organization, are available to others.

Products and Services: On-line retrieval services are provided. Computer printouts and microforms are made available by mail or interactive terminal, on an irregular basis. **Availability of Products and Services:** Although the data bank is still operating as a pilot study, its services are generally available. When the system is fully operational, there will be descriptive material in English.

Future Plans: Viruses of plants and invertebrates will be added to the data bank.

Italy

EPI-IT-046

ANIMAL HEALTH YEARBOOK

Food and Agriculture Organization of the United Nations
Via delle Terme de Caracalla
00100 Rome
Italy

Contact: Heinz O. Konigshofer, Editor

Funding Organizations: Office International des Epizooties
12, rue de Prony
Paris XVII
France

World Health Organization
Avenue Appia
1211 Geneva 27
Switzerland

Mission and Function: The *Animal Health Yearbook* collects, compiles, and disseminates international animal disease information to aid in the prevention and control of animal diseases by supplying data to support the work of national veterinary regulatory agencies, academic researchers, and the veterinary pharmaceutical industry. It is hoped that this information will facilitate the expansion of international trade in livestock and animal products under sanitary conditions, and expedite diagnosis of notifiable or controlled diseases. Data have been collected annually since 1956. The *Yearbook* was issued originally under the auspices of the Food and Agriculture Organization of the United Nations and the Office International des Epizooties; the World Health Organization became a cosponsor in 1961.

Types of Information Available: Epidemiologic data are collected from official sources of animal disease statistics throughout the world. Questionnaires are distributed annually to the chief veterinary officers of participating countries. In addition to disease incidence and control measures, each country may contribute narrative notes in English, French, or Spanish, to augment or explain the tabular data, and supplementary reports that originate from a government-authorized source. These supplementary reports generally pertain to vesicular diseases.

Data Elements and File Size: Data are compiled in a series of eight tables of diseases of mammals and birds. Over 100 diseases or classes of disease, arranged by viral strain or genus of the causal agent, are included. Diseases of bees and fish are listed in separate tables. Reporting countries are listed in eight groups according to geographic proximity. Each country specifies the species of animal in which the disease or its absence is reported; indicates the relative prevalence or absence of the disease with an incidence symbol; and provides a mnemonic code for the means by which the disease is controlled. The published *Yearbook* is arranged by disease, within each geographic group. Data have been collected since 1956.

Processing Mode: The *Yearbook* is assembled and edited manually.

Products and Services: In addition to the tabular data, narrative notes, and supplementary reports, the *Yearbook* contains an appraisal of changes that have occurred in patterns of livestock disease since the last reporting year.

Availability of Products and Services: The *Animal Health Yearbook* is sold by sales agents of the FAO. Member governments of the FAO, OIE, and WHO, as well as contributing veterinary officials, receive free copies. Data contained in the *Yearbook* may be reproduced freely if proper attribution is made; contact the FAO for further information about use of the data.

Korea

EPI-KR-047

KOREA ANIMAL HEALTH DIVISION

Korea. Ministry of Agriculture and Fisheries. Animal Health Division
Livestock Bureau
Seoul
Korea

Contact: Bom Rae Kim, Director of Animal Health Division

Telephone: Seoul 75-1620

Mission and Function: Since 1948, the Animal Health Division has collected and distributed information about animal health, animal production, and veterinary medicine in Korea. Data are contributed to the Office International des Epizooties.

Types of Information Available: Epidemiologic, laboratory and clinical, and statistical data are collected from worldwide sources of bibliographic, research-in-progress, numerical, and graphic data on animal production, veterinary medicine, and animal quarantine. Approximately 80 percent of the records in the data bank are derived from primary sources in Korean and English, and 20 percent from secondary sources.

Data Elements and File Size: Stored records include numerical data. Source materials are stored both in the original language and in Korean translation. The file is updated monthly.

Processing Mode: Processing, retrieval, and storage are accomplished manually.

Products and Services: The Animal Health Division produces a printed periodical. Information from the Division is distributed to users by telephone, mail, or teletypewriter printout. Data analysis service is available monthly and on demand.

Availability of Products and Services: Services are available to all, without charge.

Switzerland

EPI-SZ-048

SCHWEIZERISCHE TOLLWUTZENTRALE (SWISS RABIES CENTER)

Universitaet Bern. Vet.-Bakteriologisches Institut
Langgasstrasse 122
CH 3012 Bern
Switzerland

Contact: F. Steck

Telephone: (031) 23 83 83

Funding Organization: Switzerland. Eidgenoessisches Veterinaeramt
Thunstrasse 17
CH 3005 Bern
Switzerland

Mission and Function: The Swiss Rabies Center was established in 1967 to conduct epidemiological surveillance of rabies in Switzerland as a basis for control and prevention of that disease. It is supported by Federal and cantonal veterinary public health offices.

Types of Information Available: Epidemiologic, laboratory and clinical data are collected in numerical and graphic form (charts, maps, etc.). The data bank is confined in subject scope to Swiss animal species affected by rabies, and the regional distribution of those species. All data are derived from primary sources in German and French.

Data Elements and File Size: Distribution of rabies cases is listed by species and canton. As of mid-1980, the data bank contained approximately 60,000 records, stored in their original languages. About 6,000 records are processed annually, by quarterly updates. Records date from 1967 to the present.

Processing Mode: The data bank is manual.

Products and Services: On a quarterly basis, the Swiss Rabies Center produces a three-month summary of epidemiologic data, with an accompanying map. These summary data are distributed by mail and, in special cases, by telephone. The Center also provides other epidemiologic information on rabies for the medical profession.

Availability of Products and Services: Queries should be submitted by mail, stating the purpose of the request. No fees are charged for services.

United Kingdom

EPI-UK-049

ANIMAL DISEASE OCCURRENCE

Commonwealth Bureau of Animal Health
New Haw
Weybridge
Surrey KT15 3NB
U.K.

Contact: Sheila M. Woods, The Editor

Telephone: Byfleet (09323) 42826

Parent Organization: Commonwealth Agricultural Bureaux
Farnham House, Farnham Royal
Slough SL2 3BN
U.K.

Funding Organization: Commission of the European Communities. Directorate-General for Scientific and Technical Information
DG XIII
Batiment Jean Monnet
Kirchberg
Luxembourg

Mission and Function: The data bank collects published data on animal diseases of economic or public health importance. Established in 1980, it is still in the developmental stage. It is accessible as a subfile of the automated CAB Abstracts system.

Types of Information Available: Bibliographic and numerical data are collected from published and unpublished sources of recorded epidemiological and economic data and statistics on animal disease occurrence and its costs. Species included in the system include domesticated mammals, poultry, bees, and fish. Although data in the system are worldwide in scope, they are derived only from sources in European languages. These sources include journals, reports, congress proceedings, theses, bulletins of notifiable diseases, and unpublished sources such as data obtained from government departments, health organizations, marketing cooperatives, abattoirs, and universities.

Data Elements and File Size: Data elements contained in stored bibliographic records consist of descriptive cataloging data, including names of authors, bibliographic citation, and author affiliation; subject descriptors; abstracts; and numerical data. Titles are stored both in the original language and in English translation. On the average, approximately three index postings, selected from a fixed vocabulary, are entered for each record and are coded according to a method devised in-house. Author, subject, and geographic access to the data are provided. Each year, approximately 400 documents will be processed. The data

bank will be updated once a month.

Processing Mode: The data bank will use both computer on-line processing and manual techniques for processing and retrieval, and magnetic tape for storage. A software package developed by the Commonwealth Bureau of Animal Health will be used.

Products and Services: Retrieval services will include searches of the current file and on-line access to it. Information products will include magnetic tapes, a published abstract journal, and numerical compendia.

Publications: The semiannual journal derived from the data bank, also titled *Animal Disease Occurrence*, contains both abstracts of the literature and tables of factual data derived from the documents or sources abstracted in the first section. The abstracts are classified under 12 species headings, including Animal diseases in general, Horse diseases, Cattle diseases, Sheep and goat diseases, Swine diseases, Dog and cat diseases, Poultry diseases, Fish diseases, Bee diseases, and Diseases of other animals. Within each species section, abstracts are arranged and numbered in a specific order: general, bacterial diseases, viral diseases, mycoses, protozoal infections, nutritional and metabolic disorders, and other diseases. The tabular data, which contain abstract numbers referring to the documents from which the data were extracted, appear in 12 tables: Geographical occurrence, Horse diseases, Cattle diseases, Sheep and goat diseases, Swine diseases, Cat diseases, Dog diseases, Poultry diseases, Fish diseases, Bee diseases, Diseases of other animals, and List of pathogens and parasites. The tables contain the country, occurrence, year of occurrence, type of animal, and aspect of diseases affecting each species. The "aspect" column qualifies the data in the "occurrence" column by specifying the source of the information, diagnostic technique, method of data collection, size of the survey, etc. Each issue of the journal is indexed by author and subject. *Animal Disease Occurrence* is intended to supplement the qualitative information provided by the *Animal Health Yearbook*, sponsored jointly by the Food and Agriculture Organization of the United Nations, the Office International des Epizooties, and the World Health Organization, as well as the monthly bulletins of the Office International des Epizooties. It is not intended to provide immediate notification of the animal disease status of any country.

Availability of Products and Services: Retrieval services are available without restriction, for a fee. Information on charges and vendors for direct on-line access through CAB Abstracts may be obtained from the Sales Director, Commonwealth Agricultural Bureaux, Farnham Royal, Slough SL2 3BN, U.K. Contact the Editor of *Animal Disease Occurrence* for information on availability of the printed journal.

EPI-UK-050

DAIRY INFORMATION SYSTEM (DAISY)

University of Reading. Department of Agriculture and Horticulture. Veterinary Epidemiology and Economics Research Unit
Earley Gate
Reading RG6 2AT
U.K.

Contact: Peter R. Ellis

Telephone: Reading (0734) 85123
Telex: 847813 RULIB G

Mission and Function: DAISY was established in 1978 to provide farmers with continuously updated information on the health and productivity of their cows, and to gather data for epidemiologic and economic studies. The data bank is still in the developmental stage.

Types of Information Available: Epidemiologic, management, and production data are collected wholly from primary sources. In addition to health and disease information, data on cows' milk quality, yield, weight, and condition are collected. The system is limited to national data.

Data Elements and File Size: Each stored record contains numerical data on the cow's production, weight, and genealogical and breeding history, as well as location information and a description of all important events pertaining to fertility and disease. Data are collected and stored in English. Records are indexed by the names of stock and the individual identity number of each cow. Data may be accessed by herd and aggregated by geographic location; data are not aggregated for the whole population. In mid-1980, the file contained over 10,000 records, relating to 6,000 cows; it is updated weekly. Records date from 1977 to the present.

Processing Mode: Data are processed and retrieved by on-line computer and are stored on disc. DAISY's hardware consists of a Computer Automation LSI 4/30, a 32k mini-computer. The software was developed especially for the system, and can be made available to other organizations.

Products and Services: Information products, in the form of computer printouts of aggregated data, are generated weekly, monthly, and annually, as well as on demand, and are delivered to users by mail. Financial services are also provided to related systems by the Veterinary Epidemiology and Economics Research Unit (VEERU).

Availability of Products and Services: Requests to use the

data bank should be addressed to the Director of the Veterinary Epidemiology and Economics Research Unit. Although information services are generally available, fees are charged. The system is described in English by the *DAISY Manual*, available from VEERU.

Future Plans: PEARLS, a similar recording system for data on pigs, is currently being developed. Herd and veterinary data recording systems are under development, with VEERU help, in several countries to provide information for planning, management, disease control, and research.

EPI-UK-051

VETERINARY INVESTIGATION DIAGNOSIS ANALYSIS II (VIDA II)

United Kingdom. Ministry of Agriculture, Fisheries, and Food. Central Veterinary Laboratory. Epidemiology Unit
New Haw
Weybridge
Surrey KT15 3NB
U.K.

Contact: W. A. Edwards, Research Officer

Telephone: Byfleet 41111
Telex: 262318
Cable: MEDIUM ADDLESTONE

Parent Organization: United Kingdom. Ministry of Agriculture, Fisheries, and Food. State Veterinary Service
Hook Rise South
Tolworth, Surbiton
Surrey KT6 7NF
U.K.

Mission and Function: VIDA II records all diagnoses made at the 33 veterinary investigation centers of the Ministry of Agriculture, Fisheries, and Food in Scotland, England, and Wales. The system, established in 1975, is intended to tabulate all diagnoses made by recognized reporters, tally all submissions to the centers, and record financial charges. Consequently, it does not provide a definitive record of disease incidence or prevalence, or act as an emergency recording system or rare event register. Nevertheless, VIDA II's bias is relatively constant, and thus the system may be said to indicate trends in disease prevalence.

Types of Information Available: Laboratory data from veterinary investigation center diagnostic records are collected in numerical form. All data are derived from these primary sources of animal disease data in Great Britain. Data pertain primarily to cattle, sheep, pigs, and birds, with all other animals categorized as "miscellaneous species." Records are made for each submission of material to a center by a practicing veterinarian, and thus may refer to a single specimen or to a batch of specimens from one herd or flock.

Data Elements and File Size: Each stored record contains the following coded data for each submission of material: the veterinary investigation center, the age and species of the animal, the date of submission, the county of origin of the submission, the number and type of specimens, the fee charged, and the diagnosis. VIDA II has developed unique coding systems for the type of specimen, species and age of animal, and diagnosis. Data may be retrieved by geographic location and by these numeric codes. The data bank contained approximately one million records in mid-1980, dating from January 1975 to the present. Approximately 250,000 records are processed each year, through monthly updates.

Processing Mode: Data are keyed directly into two ICL 1906 computers at the Ministry of Agriculture's computer center. Before they are added to the VIDA II file, records are validated by machine. Data are stored on magnetic tape and disc, and are retrieved by both batch and on-line computer processing.

Products and Services: Monthly and annual tabular data are produced by retrospective file searches. The annual numerical compendia provide national aggregate listings of the diagnoses made during previous months or years. VIDA II also offers selective dissemination of information service and on-line access on demand. Information may be provided to users by telephone, mail, or teletypewriter printouts.

Publications: *Animal Disease Reports*, issued quarterly, is intended to disseminate tabular data rapidly to those responsible for animal disease control activity.

Availability of Products and Services: Information services are restricted to the Ministry of Agriculture and related organizations, particularly counterpart agencies in the European Community; they are available to few commercial firms. All requests should be submitted to the Epidemiology Unit. No fees are charged. An article describing the system is available: Hall, S. A.; Dawson, P. S.; and Davies, G. "VIDA II: A Computerized Diagnostic Recording System for Veterinary Investigation Centres in Great Britain." *Veterinary Record*, 106:260-264, March 22, 1980.

EPI-UK-052

ZOONOSES ORDER DATA

United Kingdom. Ministry of Agriculture, Fisheries, and Food. Central Veterinary Laboratory. Epidemiology Unit
New Haw
Weybridge
Surrey KT15 3NB
U.K.

Contact: J. C. Bell

Telephone: Byfleet 41111
Telex: 262318
Cable: MEDIUM ADDLESTONE

Parent Organization: United Kingdom. Ministry of Agriculture, Fisheries, and Food. State Veterinary Service
Hook Rise South
Tolworth, Surbiton
Surrey KT6 7NF
U.K.

Mission and Function: Pursuant to the Zoonoses Order of 1975, all isolations of salmonella in food animals, their products, or surroundings in the United Kingdom must be reported. These reports are compiled in the Zoonoses Order data bank, established in 1980 and still in the developmental stage.

Types of Information Available: Epidemiologic data are collected from salmonella incident reports containing information on the type and date of each outbreak, and the phage and type of salmonella involved. Notification is compulsory in cattle, sheep, goats, pigs, rabbits, fowl, turkeys, geese, ducks, guinea fowl, pheasants, partridges, and quails. Reports of salmonellosis in other species are accepted and recorded. These primary sources of data apply to England, Scotland, and Wales.

Data Elements and File Size: Data elements include the owner and geographic location of the affected animals within the United Kingdom; the isolating and typing laboratories; the serotype and phage type of the organism isolated, and its antibiotic sensitivity pattern; the species and age of the animal host; and evidence of clinical salmonellosis or human infection. It is expected that approximately 3,000 records will be processed each year.

Processing Mode: Both batch and on-line modes are used for computer processing and retrieval; magnetic tape is used

for storage. The data bank is maintained on two ICL 1900 computers, with software developed in-house.

Products and Services: Retrieval services provided by the Zoonoses Order data bank consist of current and retrospective file searches, selective dissemination of information service, and on-line access. Information is delivered to users by mail or via interactive computer terminal. Statistical compendia are produced quarterly, and are included in the *Animal Disease Reports*, compiled by the Epidemiology Unit.

Publications: *Animal Salmonellosis*, the annual summary of salmonella incidents, has been published since 1977. It is available from the Epidemiology Unit.

Availability of Products and Services: To obtain information on Zoonoses Order data, submit a written request to the Epidemiology Unit, Central Veterinary Laboratory, New Haw, Surrey KT15 3NB, U.K. Services are available without restriction; no fees are charged.

United States

EPI-US-053

ARKANSAS ANIMAL MORBIDITY REPORT

Arkansas. Epizootic Disease Program
4815 W. Markham
Little Rock AR 72201
U.S.A.

Contact: Thomas C. McChesney, Director

Telephone: (501) 661-2264

Parent Organization: Arkansas. Department of Health

Mission and Function: The *Arkansas Animal Morbidity Report* collects, tabulates, and disseminates information on animal diseases occurring in Arkansas, with special emphasis on those diseases that may be transmitted to man. The *Report* has been issued since 1956.

Types of Information Available: The *Report* compiles numerical data reported by primary sources of statistics on animal health and disease in the state of Arkansas.

Data Elements and File Size: In addition to numerical data, each stored record contains information on the sponsoring or reporting agencies or organizations. Records are

indexed and are accessible by species and disease. Data are compiled four times a year.

Processing Mode: Data are processed manually.

Products and Services: Animal morbidity data are published in a quarterly statistical report.

Availability of Products and Services: The *Arkansas Animal Morbidity Report* is available without restriction; no fee is charged.

EPI-US-054

MEAT AND POULTRY INSPECTION PROGRAM REPORTING SYSTEM (MPRSYY80)

United States. Department of Agriculture. Food Safety Inspection Service

South Agriculture Bldg., Rm. 4443

14th and Independence Ave., S.W.

Washington DC 20250

U.S.A.

Contact: Kenneth Wissmann, Chief, Management Reports and Data Analysis Group

Telephone: (202) 447-7551

Mission and Function: The mission of the Meat and Poultry Inspection Program Reporting System, established in 1977, is to collect, store, analyze, formulate, and disseminate Meat and Poultry Inspection information. All U.S. meat, poultry, and related products processed by plants engaged in interstate and foreign commerce are inspected—the animals at time of slaughter and the processed products during various stages of production and handling—to assure wholesomeness. Federal inspectors also conduct surveillance of foreign inspection systems and poultry products for export to the U.S.A. In addition to cattle, swine, goats, sheep, and equine species, inspection services for domestic rabbits and reindeer are offered.

Types of Information Available: Statistical data on animal disease in the United States and its territories are collected from reports submitted by Federal and state meat and poultry inspectors. Virtually all of the data are derived from these primary sources. The system also contains various management data, including personnel records and service applications.

Data Elements and File Size: Each stored record includes subject or category codes and numerical data. Specific data collected on various report forms include the number of

establishments within each state under grant of Federal inspection of meat and poultry slaughter and/or processing; weekly livestock slaughter reports for each plant, reporting the number of head, total liveweight, and total dressed weight of cattle, calves, hogs, sheep, goats, horses, and mules; and ante-mortem and post-mortem inspection summaries for these species, including codes for the disposition of carcasses exhibiting emaciation, degenerative and dropic conditions, actinomycosis or actinobacil, coccidioidal granuloma, swine erysipelas, mastitis, metritis, nephritis or pyelitis, pericarditis, peritonitis, pneumonia, uremia, carcinoma, epithelioma, malignant lymphoma, sarcoma, miscellaneous neoplasms, tuberculosis, abcess pyemia, septicemia, toxemia, arthritis, contamination, caseous lymphadenitis, cysticercosis, eosinophilic myositis, swine sexual odor, icterus, injuries, myiasis, residue, skin conditions, and other miscellaneous diseases, as well as the number of livers condemned for abcess, carotinosi, cirrhosis, distoma, melanosis, "sawdust," telangiectasis, and other degenerative or parasitic conditions, and the number of brucellosis and tuberculosis specimens collected. In addition to inspection tallies of young chickens, mature chickens, and turkeys, poultry data include the number of head condemned for tuberculosis, leukosis, septicemia and toxemia, synovitis, tumors, bruises, overscald, airsacculitis, etc. Data are collected on the amount of various meat and meat food products processed or canned; as well as the amount of beef, veal, lamb and mutton, goat, pork, or horse meat products condemned for being tainted, sour, putrid, rancid, containing molds or other foreign matters; being contained in unsound canned goods; being unclean or contaminated; or having miscellaneous pathological conditions. Data are also reported on the amount of other material subject to inspection (spices or seasonings, casings, fruits and vegetables, etc.) that have been rejected for use because of noncompliance with Federal regulations; combination; odor, color, or taste; sourness or mold; and unsound canned goods. There were approximately 400,000 records of inspection in the system in mid-1980, dating from 1977 to the present. Approximately 100,000 are added annually, through weekly updates.

Processing Mode: The system uses computer batch processing for data processing and retrieval. It employs an IBM 370/168 at the Washington Computer Center, a Four Phase IV-90 terminal, and standard software packages. Data are stored on magnetic tape.

Products and Services: Retrieval services consist of searches of the current file. Search products are in the form of computer printouts, generated weekly, monthly, quarterly, annually, and on demand. Information is delivered to users by telephone or mail, or in response to inquiries made

in person. Numerical compendia, in the form of statistical summaries, are published annually.

Availability of Products and Services: Although services are intended for in-house use, they will be made available in response to Freedom of Information Act requests. When special compilations of data must be made, a fee will be charged. Fees may range from \$13.00 to \$27.50 per hour for the services of an analyst, plus the computer execution fee.

EPI-US-055

MICHIGAN ANIMAL HEALTH DIAGNOSTIC LAB CASE ABSTRACTS (AHDL ABSTRACTS)

Michigan State University- Animal Health Diagnostic Lab
Michigan State University, P101, AHDL
East Lansing MI 48824
U.S.A.

Contact: Kenneth K. Keahey, Director, AHDL

Telephone: 1-(517) 353-1683

Mission and Function: The Animal Health Diagnostic Lab Case Reports system was established in 1968 by the referral laboratory for the State of Michigan to provide epidemiologic surveillance of animal diseases for purposes of teaching and research. This project is being operated in cooperation with the Michigan Departments of Agriculture and Natural Resources.

Types of Information Available: Numerical epidemiologic, laboratory, and clinical data on animal diseases are collected entirely from primary sources of data pertaining to the Michigan region. Data are supplied by cooperating veterinarians in private and governmental practice.

Data Elements and File Size: Each stored record contains numerical data arranged by subject and by biosystematic classification codes. One index posting is supplied for each record. There were 125,000 records in the data bank in mid-1980, dating from 1964 through the present. An annual update adds approximately 15,000 records to the data bank each year.

Processing Mode: Computer batch processing and retrieval are accomplished with a CDC Cyber 750 series computer. Records are stored on magnetic tape. The data bank employs software developed within the laboratory; this software is available to other data banks.

Products and Services: Retrospective file searches are conducted on demand, and the results are delivered via teletypewriter printout.

Availability of Products and Services: The data bank may be accessed by executing an on-line program for batch-mode retrieval. This type of access is provided upon approval of the director of the Animal Health Diagnostic Lab. Responses to other inquiries will be made by mail or telephone. No fees are charged.

Future Plans: An on-line data collection system is being developed as part of a laboratory reporting system, and the epidemiologic and laboratory data collection effort is being expanded.

EPI-US-056

MINNESOTA FOOD ANIMAL DISEASE REPORTING SYSTEM (MFADRS)

Minnesota. Livestock Sanitary Board
LL70 Metro Square
7th and Robert
St. Paul MN 55101
U.S.A.

Contact: L. T. Christensen, Assistant State Veterinarian

Telephone: (612) 296-3592

Mission and Function: MFADRS was established in 1971 to accumulate disease incidence rates of food animals by random sampling of known animal populations. It is currently in full operation.

Types of Information Available: MFADRS is based on disease reports from practicing veterinarians and producers with known numbers of animals at risk, which provides a true incidence rate. Numerical data are collected statewide from these primary sources of statistics on animal disease and the economic losses thereby entailed.

Data Elements and File Size: Data elements included in each stored record consist of the occurrence or non-occurrence of disease in an animal during a month of surveillance within a regional sampling cluster. Records may be retrieved by variable, such as disease or herd location. The records in the data bank date from 1971 to the present. The data bank is updated quarterly.

Processing Mode: Punched cards are used for processing and retrieval. Records are stored on punched cards and

magnetic tape. In-house software packages, which are available for outside use, are employed.

Products and Services: Information products consist of computer printouts of incidence rates, which are delivered to users by mail and reported in a newsletter. Output is produced on a quarterly basis.

Availability of Products and Services: Contact the Livestock Sanitary Board for information about the availability of services.

Future Plans: A study is currently being conducted to validate the information gathered by the present system. Based on the results of the study, which should be completed in 1981, a determination will be made as to whether the system should be continued.

EPI-US-057

MISSISSIPPI BOARD OF ANIMAL HEALTH AND VETERINARY DIAGNOSTIC LABORATORY

2531 N. West St.
P.O. Box 4389
Jackson MS 39216
U.S.A.

Contact: Harvey F. McCrory, Director and State Veterinarian

Telephone: (601) 354-6089

Mission and Function: The mission of the Diagnostic Laboratory data bank is to store records of equine infectious anemia for epidemiologic study and infection incidence information.

Types of Information Available: Data are collected from reports of tests conducted on serum samples submitted to the Diagnostic Lab. All specimens are taken from within the State of Mississippi.

Data Elements and File Size: Data elements in each stored record include the location of the horses, the date tested, and number of positive and negative test results. Data are tabulated by location and date.

Processing Mode: Manual and computer batch processing are used for data processing and retrieval. Records are stored in manual files and on magnetic tape. The data bank uses a Datapoint computer, VISI records system, and standard software packages.

Products and Services: Current and retrospective searches of the file to produce statistical analyses are provided. In-

formation products consist of computer printouts and reports, delivered to users by mail or telephone. Output is produced on demand.

Availability of Products and Services: Requests for services should be addressed to the Director by mail or telephone. No fees are charged, and services are generally available.

EPI-US-058

NATIONAL WILDLIFE HEALTH LABORATORY (NWHL)

1655 Linden Dr.
Madison WI 53706
U.S.A.

Contact: Lynne M. Siegfried, Chief, Section for Disease Identification and Control

Telephone: (608) 264-5418

Parent Organization: United States. Fish and Wildlife Service
1655 Linden Dr.
Madison WI 53706
U.S.A.

Mission and Function: The data bank of the National Wildlife Health Laboratory was established in 1975 to perform statistical evaluations of the impact of animal disease on specific species and regions. The data bank is still in the developmental stage of operation.

System Description: Numerical data are collected from primary sources of epidemiologic and statistical data and laboratory diagnostic information on health and disease of free-living wildlife. Information sources pertain primarily to North America and Hawaii.

Data Elements and File Size: Each record is analyzed by subject codes and biosystematic classification codes. Approximately 15 index postings, on the average, are supplied for each record, selected from a fixed vocabulary. Data may be accessed by subject or geographic region. Records date from 1975 to the present. The data bank is updated twice a week.

Processing Mode: Records are processed, stored, and retrieved manually, with an optical coincidence punched card McBee Keydex system.

Products and Services: Statistical analyses of the current file and searches of the retrospective file are provided, as

is selective dissemination of information (SDI) service. Output consists of manually sorted punched cards and a year-end report. Services are provided on an irregular basis.

Availability of Products and Services: On-site utilization of the data bank's records is available to all. At present, most data analysis services are limited to the staff of the Laboratory, to whom no fees are charged. Portions of the data bank—data on eagles in particular—have been computerized. These data will be made available to interested persons and agencies on request. For information on use of the data bank, contact the Director of the Laboratory, Dr. Milton Friend, (608) 264-5411.

Future Plans: Computerization is planned for the entire system in the future. This will allow ready access to the data, which will then be made widely available.

EPI-US-059

NEBRASKA SPF SWINE ACCREDITING AGENCY (NEBRASKA SPF)

105 Veterinary Basic Science Bldg.
Fair St. at East Campus Loop
Lincoln NE 68583
U.S.A.

Contact: Thomas E. Socha, Secretary-Manager

Telephone: (402) 472-3818

Mission and Function: The Nebraska SPF Swine Accrediting Agency maintains records for all accredited specific-pathogen-free (SPF) swine herds in Nebraska in order to prevent or control specific diseases and parasites. The system shares data with the National SPF Swine Accrediting Agency, Inc.

Types of Information Available: Research, numerical, photographic, and graphic data are collected from primary sources of epidemiologic, laboratory, clinical, and statistical data on swine health, disease, and performance within the state.

Data Elements and File Size: Data elements in each stored record consist of numerical data pertaining to individual herds. There were 10,000 records in the data bank in mid-1980, with 700 added each year. The records in the data bank date from 1960 to the present.

Processing Mode: The data bank uses manual and punched card methods for data processing and retrieval, as well as batch processing on an IBM 360/65 computer. The data bank uses software developed in-house.

Products and Services: Services include retrospective file searches, selective dissemination of information services, and statistical analyses of the current file. Information products consist of computer printouts and an annual printed periodical containing summarized data, which are delivered to users by mail. Services are provided on an irregular basis.

Availability of Products and Services: Services are restricted to Nebraska swine producers and to researchers.

Future Plans: Plans to put all data onto an on-line system are being considered.

EPI-US-060

NEVADA ANIMAL DISEASE LABORATORY

Nevada. Department of Agriculture. Animal Disease Laboratory
Box 11100
Reno NV 89509
U.S.A.

Contact: Robert Tromstad, Supervisor

Telephone: (702) 784-6229

Mission and Function: The mission of the Animal Disease Laboratory's data bank, established in 1966, is to compile records of disease incidence for the state of Nevada.

Types of Information Available: Numerical and statistical data on animal health and disease are collected for diagnostic corroboration from specimens submitted by veterinarians within the state. Data are derived from post mortem examinations of tissue and carcasses, serologic tests for various diseases such as leptospirosis in livestock, and rabies testing.

Data Elements and File Size: Data elements included in each stored record are recorded by an internally developed system of pathologic and epidemiologic terms. Generally, one index posting is entered for each record. There were approximately 45,000 records in the data bank in mid-1980, with 4,000 added each year. Access to the data bank is by subject index. Records date from 1966 to the present.

Processing Mode: Manual and punched card methods are used for processing and retrieval. Records are stored in manual files and on punched cards.

Products and Services: Responses to requests for information, derived from manually sorted punched cards, are delivered to users by mail or telephone. Data are compiled in a Monthly Report submitted to the State Veterinarian's office.

Availability of Products and Services: Requests for services should be directed to the supervisor of the Laboratory. Although services are generally available, any compilations from monthly reports that are produced for special requests are available only as limited staff time permits.

EPI-US-061

NEW MEXICO BRUCELLOSIS COMPUTER SYSTEM

State Federal Cooperative Laboratory
Box 464
Albuquerque NM 87103
U.S.A.

Contact: C. L. Campbell

Telephone: (505) 766-2573

Parent Organization: United States. Department of Agriculture. Animal and Plant Health Inspection Service. Veterinary Services
517 Gold Ave., Rm. 4006
Albuquerque NM 87103
U.S.A.

Mission and Function: The mission of the data bank is to store and retrieve information on brucellosis in New Mexico. Established in 1976, the data bank is in full operation.

Types of Information Available: The data bank contains testing records with epidemiologic, laboratory, clinical, and statistical data on brucellosis. Information is collected only from primary reporting sources within the New Mexico region, i.e., practicing veterinarians and State Department of Agriculture personnel.

Data Elements and File Size: Each stored record contains results of serological tests. Approximately 30 different types of data are entered for each record. Records are retrievable by subject. There were 200,000 records in the data bank as of mid-1980, with 40,000 added each year on a monthly basis. The records date from October 1976 to the present.

Processing Mode: The data bank uses computer batch and on-line processing, on Datapoint 1100 and CDC 6600 equipment. Records are stored on magnetic tape and disc. A System 2000 (MRT) software package is used.

Products and Services: Current and retrospective file searches and on-line access are provided. Information pro-

ducts consist of computer printouts of brucellosis incidence, delivered to users by teletypewriter. Services are provided monthly and on request.

Availability of Products and Services: Services are restricted to official government users.

Future Plans: The New Mexico Brucellosis Computer System plans to participate in a forthcoming nationwide data base on brucellosis.

EPI-US-062

OKLAHOMA STATE-FEDERAL BRUCELLOSIS LABORATORY

50 N.E. 23rd St.
Oklahoma City OK 73105
U.S.A.

Contact: Paul D. Woodson, Laboratory Supervisor

Telephone: (405) 231-4291, or 521-3876

Parent Organization: Oklahoma. State Department of Agriculture. Animal Industry Division
312 N.E. 28th St.
Oklahoma City OK 73105
U.S.A.

Mission and Function: The data bank was established more than 25 years ago to support the Brucellosis Eradication Program, to collect data on the prevalence and incidence of equine infectious anemia, and to collect limited data on other zoonotic diseases in Oklahoma.

Types of Information Available: The data bank collects numerical data from charts, laboratory records, and inventory records. All of the material in the data bank is derived from these primary sources of epidemiologic and laboratory data and statistics on animal health and disease in the state.

Data Elements and File Size: Records, pertaining to samples submitted to the Laboratory for testing, contain information on the location of the affected animals, and the number of positive and negative test results. Some vaccination records and parasitology data are also collected. Inventory data are gathered for test reagents. Data that are of common use to other agencies and states are totaled continuously. Approximately 900,000 samples are processed each year. The data bank is updated four times a week. Records date from 1972 to the present.

Processing Mode: The data bank uses manual methods for processing and retrieval as well as for record storage.

Products and Services: Both current and retrospective file searches are provided, as often as daily. Services are delivered to users by telephone and through the mail.

Availability of Products and Services: Inquiries concerning the availability of data should be directed to the Laboratory Supervisor. No fees are charged.

Future Plans: Purchase of a Datapoint computer is planned.

EPI-US-063

RESIDUE MONITORING SYSTEM

United States. Department of Agriculture. Food Safety Inspection Service
Washington DC 20250
U.S.A.

Contact: John E. Spaulding

Telephone: (202) 447-2807

Mission and Function: The Residue Monitoring System was established in 1972 to store data on the incidence of drug and chemical residues occurring in meat and poultry, as determined by the Food Safety Inspection Service (FSIS) of the U.S. Department of Agriculture.

Types of Information Available: Numerical data are derived from analyses of livestock and poultry tissues collected by FSIS inspectors before and after slaughter, and occurrence of visible abnormalities in animals at slaughter. These primary data include information on heavy metals, implanted steroids and hormones, antibiotics, and pesticides, especially chlorinated hydrocarbons, DDT, lindane, chlordane, benzene hexachloride (BHC), and toxaphene. The system includes the incidence of residues occurring in meat and poultry products imported to the U.S.A.

Data Elements and File Size: There are 25,000 stored numerical records in the data bank, dating from 1972 to the present. The data bank is updated weekly.

Processing Mode: Batch and on-line computer processing are supplemented by manual processing and retrieval methods. Data are stored on magnetic tape and disc. The Residue Monitoring System uses Hewlett Packard 3000 and 2500 hardware, and in-house software.

Products and Services: Numerical compendia are produced by the system quarterly and annually. These data are disseminated by mail.

Availability of Products and Services: Requests for data, which should be directed to the FSIS by mail or telephone, will be evaluated individually. Fees may be charged, depending upon the nature of the request.

EPI-US-064

SWINE T.B. FAX

Livestock Conservation Institute
229 Livestock Exchange Bldg.
South St. Paul MN 55075
U.S.A.

Contact: Neal Black, President

Telephone: (612) 457-0132

Mission and Function: The Swine T.B. Fax data bank was established in 1972 to gather information on the incidence, at slaughter, of condemned and "passed for cooking" carcasses with tuberculosis lesions.

Types of Information Available: The data bank contains statistics compiled from monthly reports submitted by cooperating meat packers within the United States. The numerical data are collected only from these primary sources, in English.

Data Elements and File Size: Data elements in each stored record consist of data on the number of tuberculosis lesions found on swine carcasses. There were approximately 3,000 records in the data bank in mid-1980, with 420 added annually, through monthly updates. The records in the data bank date from 1972 to the present.

Processing Mode: Processing, retrieval, and storage methods are manual.

Products and Services: The data bank provides statistical analyses of the current file and a monthly compilation of data, delivered to users by mail.

Availability of Products and Services: Individual reports and compilations of the individual reports by code number are available on request. Identification of the individual reporting meat packers is not available.

EPI-US-065

TEXAS VETERINARY MEDICAL DIAGNOSTIC LABORATORY STATISTICAL REPORT

Texas Veterinary Medical Diagnostic Laboratory
Drawer 3040
College Station TX 77841
U.S.A.

Contact: The Director

Telephone: (713) 845-3414

Mission and Function: The function of the *Statistical Report* is to compile data on animal health and disease in Texas for statistical, epidemiologic, research, and public uses. The *Report* was established in 1970.

Types of Information Available: The *Report* contains numerical data from statewide sources of statistics on animal health and disease. The material in the *Report* is derived entirely from primary reporting sources.

Data Elements and File Size: Data elements included in each record consist of numerical data. Approximately 20 different types of data may be entered in each record. The *Report* is indexed by species, subject, case number, and geographic area. Twelve *Reports* are compiled each year.

Processing Mode: Computer batch processing and computer on-line processing are utilized for both processing and retrieving the data used in the *Report*. Hardware consists of an Amdahl 470 V-6 computer. The system stores records on magnetic tape and uses software developed in-house, which is available for outside use.

Products and Services: Retrieval services consist of retrospective file searches. Information products may be obtained as statistical computer printouts, magnetic tape, and published numerical compendia. The *Report* is generated monthly.

Availability of Products and Services: Requests for information should be submitted by mail. Services are available to the public for a fee.

Future Plans: The Laboratory plans to participate in data collection endeavors of the American Association of Veterinary Laboratory Diagnosticians and to submit data to the APHIS animal disease reporting system.

EPI-US-066

VERMONT. DEPARTMENT OF AGRICULTURE

116 State St.
Montpelier VT 05602
U.S.A.

Contact: David U. Walker

Telephone: (802) 828-2421

Mission and Function: The Vermont Department of Agriculture's data bank was established in 1945 to permit storage and retrieval of animal disease records useful in planning for programs, interstate animal shipments, and public health reports.

Types of Information Available: The data bank is a simple records system acceptable for epidemiologic traceback and determination of trends in disease control programs. Numerical data and charts are collected, within the state, from primary reports of epidemiologic, laboratory, clinical, and statistical data on animal health and disease.

Data Elements and File Size: Data elements included in each stored record consist of numerical data and records of laboratory test results. Data are accessible by farm owner's name and address. Records are maintained for approximately 5,000 farms, and are updated once a year. They are retained for three to five years.

Processing Mode: The data bank uses manual and computer batch processing for processing and retrieval. Records are stored in manual files and on punched cards.

Products and Services: Both current and retrospective file searches are provided. Information products consist of computer printouts, machine punched cards, and biennial numerical compendia. Some data are produced and distributed on manually sorted punched cards. Products are delivered to users through the mail and by telephone. Services are provided on an irregular basis.

Availability of Products and Services: Requests for information from the data bank should be directed to Public Records, Department of Agriculture, Montpelier, Vermont 05602. Availability of services and fees, if charged, depend on the nature and purpose of the request.

Future Plans: Increased application of computers is planned.

For other data banks containing epidemiologic data, see entries BIB-IT-003, BIB-NL-004, BIB-PE-005, BIB-UK-008, BIB-UK-009, BIB-UK-010, BIB-UK-012, BIB-UK-013, BIB-UK-014, BIB-UK-015, BIB-US-019, BIB-US-021, BIB-US-029, BIB-US-030, BIB-US-031, LAB-AU-069, LAB-FR-071, LAB-NZ-073, LAB-US-078, LAB-US-079, LAB-US-080, LAB-US-081.

LABORATORY AND CLINICAL DATA BANKS

Australia

LAB-AU-067

ANIMAL DISEASE RECORDS SYSTEM (ARPD)

Queensland. Department of Primary Industries. Animal Research Institute
Fairfield Rd.
Yeerongpilly
Queensland 4105
Australia

Contact: J. K. Elder, Senior Bacteriologist

Telephone: 07-485151
Telex: AA 42889
Cable: ANIMAL INST

Mission and Function: The Animal Disease Records System was established in 1972 to record and retrieve diagnostic results of three veterinary laboratories of the state Department of Primary Industries, Queensland.

Types of Information Available: Alphanumeric data on animal disease in the state of Queensland are collected entirely from laboratory reports.

Data Elements and File Size: Each record, stored in COBOL computer language, contains the number of animals at risk, dead, or sick, that have been tested; information on species, age, breed, vaccination history, and sex; diagnosis; and the number of animals whose tests were positive or negative. Diagnostic tests are coded according to the

Standard Nomenclature of Veterinary Diseases and Operations (SNVDO), 2nd ed., abridged (Washington: National Institutes of Health, U.S. Department of Health, Education, and Welfare, 1976). The file may be searched by any field or subfield on the unit record, including species or breed, geographic region, and diagnosis. Data have been collected from mid-1972 until the present. Approximately 30,000 records are processed annually, via weekly system updates. There were 210,000 records in the data bank as of mid-1980.

Processing Mode: A punched card system for processing and retrieval is being converted to an on-line computer system with disc storage. The new system employs a Univac 1180/82 computer. The Animal Disease Records System uses software developed within the Department of Primary Industries; its software packages are available for outside use.

Products and Services: Current and retrospective file searches, direct on-line retrieval, and statistical analyses are available from the System, on a weekly, quarterly, and annual basis. Most output is requested in the form of print-outs of tabulated data, although other information product formats could be made available. Data are delivered via interactive computer terminal, telephone, or mail.

Availability of Products and Services: Services are currently provided free to users, all of whom are government staff. Outside users would be charged a fee to recover costs. Requests for services must be addressed to the Director, Division of Animal Industries, George and Ann Sts., Brisbane Q4000, Australia. English-language descriptive material is available.

Future Plans: Plans have been made to link veterinary laboratories and field services by a computer network throughout the state of Queensland.

LAB-AU-068

DAIRY HERD HEALTH AND MANAGEMENT PROGRAM

University of Melbourne, Veterinary Clinical Centre
Werribee
Victoria 3030
Australia

Contact: W. L. Potter

Telephone: 03-741-3500

Funding Organization: Victoria, Department of Agriculture

Mission and Function: The Dairy Herd Health and Management Program was established in 1970 to record events during cows' lactation for management and health decisions.

Types of Information Available: Numerical data are collected about cows belonging to farmers in the state of Victoria who are members of the program. Laboratory and clinical data, milk production data, and statistics are derived entirely from primary sources of information.

Data Elements and File Size: Each stored record contains numerical data on milk production, as well as codes for tests and diagnoses for individual dairy cows. Records are retrievable by the name of the cow and may be aggregated by coded event, such as disease diagnosis or calving. There were approximately 180,000 records in the data bank as of mid-1980, dating from 1972 to the present. Approximately 12,000 records are processed each year. The data bank is updated twice a month.

Processing Mode: Both batch and on-line computer methods are used for processing and retrieval. Data are stored on magnetic tape and disc. The data bank's hardware consists of a CDC Cyber 170/730 computer and a Memorex 1280 cassette terminal. Software packages were developed in-house. They will be made available to other organizations that wish to contract for them.

Products and Services: Retrieval services consist of current and retrospective searches, selective dissemination of information services, on-line access, and statistical analyses of the current file. Information products, in the form of computer printouts of tabulated data, are delivered to users by mail. Output services are provided monthly and annually. Semi-annual listings of calving dates are also provided, to aid in grass budgeting.

Availability of Products and Services: Services are available to veterinarians and to farmers who are members of the program. A fee of A\$1.00 per cow is charged for joining the program, and a yearly fee of A\$1.60 per cow is levied. **Future Plans:** The data bank plans to adopt semi-automated input of milk production records from the Herd Recording Branch, Victorian Department of Agriculture.

LAB-AU-069

INSTITUTE OF MEDICAL AND VETERINARY SCIENCE
(IMVS)

Frome Rd.
Adelaide 5000
Australia

Contact: D. E. Gardner, Director of Veterinary Laboratory Services

Telephone: (08) 2287580

Telex: 8 2647

Cable: MED VET Adelaide

Funding Organization: South Australia, Health Commission
State Administration Centre
Victoria Square
Adelaide 5000
Australia

Mission and Function: The IMVS data bank has two missions: to maintain laboratory records for the purpose of client reporting and billing, and to facilitate the surveillance of animal diseases as determined by laboratory records. Established in 1979, the data bank is still in the developmental stage.

Types of Information Available: Numerical epidemiologic and statistical data are derived from laboratory records and reports of the Institute's research in progress. These primary data pertain to specimens submitted from within the state of South Australia. Data on salmonella, however, are collected on a worldwide basis, because the Institute serves as the salmonella reference laboratory for Southeast Asia. The data bank is an extensive medical data base; it is not restricted to animal health and disease. It also contains accounting and management information.

Data Elements and File Size: Each stored laboratory record contains numerical data arranged by biosystematic

classification codes and contract, grant, or project number. There are approximately four index postings per record, including client, species, and date. The data bank may be accessed and data tabulated by subject, geographic location, test or disease code, client, species, or date. In mid-1980, there were approximately 20,000 records in the data bank, which grows at the rate of 12,000 records each year, updated continuously on-line. Records date from March, 1979, to the present.

Processing Mode: Manual and computer batch and on-line methods are used for processing and retrieval. The present hardware, CDC System 17, is to be replaced by a Burroughs B6808 computer. Both standard software and software developed specifically for the IMVS are employed. Software developed by the Institute is available to the other institutions and data banks. Data are stored on magnetic tape, microforms, and disc.

Products and Services: Both searches and statistical analyses of the current and retrospective files are provided, and may be obtained as frequently as daily. On-line access to the data bank is also available. Output formats include computer printouts, microforms, and magnetic tapes, delivered to users by mail, teletypewriter printout, interactive computer terminal, and by an on-line Telex network. The system also provides management information and management statistical services, as well as direct client reporting and accounting.

Availability of Products and Services: Applications for services should be submitted to the Director. Because of the accounting and individual medical data contained in the data bank, data are restricted to members of the IMVS and appropriate agencies of the Australian and South Australian governments. At the present, no fees are charged for services to these groups. However, software used in the IMVS data bank will be shared with other data banks.

Future Plans: This system was introduced in 1970 for medical reporting and recording. Its current veterinary applications are reporting, accounting, and "housekeeping." However, technical veterinary data are progressively being introduced in 1980. By 1981, animal health and disease data should become a significant part of the system.

LAB-AU-070

LABTESTS — ANIMAL HEALTH LABORATORY RECORDING SYSTEM

Western Australia. Department of Agriculture. Animal Health Laboratory
Jarrah Rd.
South Perth
Western Australia 6151
Australia

Contact: J. M. Armstrong, Chief Veterinary Surgeon

Telephone: (09) 3670111

Telex: AA93304

Cable: AGDEP Perth

Mission and Function: The LABTESTS data bank's mission is to record animal disease data and test results from three regional laboratories in the state of Western Australia. Fully operational, LABTESTS was established in 1978.

Types of Information Available: Numerical laboratory data on animal health and disease are collected entirely from the three reporting laboratories. Only data from Western Australia are included.

Data Elements and File Size: Each stored record consists of numerical data arranged by subject and biosystematic classification codes. Data may be retrieved and tabulated by subject, geographical location, and code.

Processing Mode: Data are processed and retrieved on-line, with a Data General Nova 3D computer. Data are stored on microforms and disc. Software packages developed for LABTESTS are available for use by other agencies and data banks.

Products and Services: Retrieval services available from LABTESTS include current and retrospective file searches, on-line access, selective dissemination of information, data compilation for reports, and construction of maps. Results are delivered via telephone, mail, interactive computer terminal, and teletypewriter printout. Some services are provided on an annual basis; others on request.

Availability of Products and Services: Search requests are handled either interactively or upon written request directed to the EDP Manager. LABTESTS was designed to serve officers of the Western Australia Department of Agriculture. Others may be accommodated by special arrangement. No fees are charged. Descriptive material is available in English.

Future Plans: The addition of dial-up capability for the participating regions is under consideration.

France

LAB-FR-071

**CENTRE NATIONAL D'INFORMATIONS TOXICOLOGIQUES VETERINAIRES
(C.N.I.T.V.)**

Ecole Nationale Veterinaire de Lyon
Marcy l'Etoile
69260 Charbonnieres-les-Bains
France

Contact: G. Keck

Telephone: 887-10-40

Mission and Function: The C.N.I.T.V. was established in 1976 to compile, store, and retrieve toxicological information in order to provide rapid responses, by telephone or mail, to urgent inquiries from veterinary practitioners, and to serve as a complete, permanent animal toxicological information center. The Centre maintains liaison with French human poison control centers.

Types of Information Available: The data bank contains bibliographic data, in the form of references analyzed by veterinary researchers, and case histories, from which it derives epidemiologic, clinical management, and statistical data on animal toxicology. Although a large percentage of the current data stored by the Centre has been derived from secondary bibliographic sources, data extracted from cases and inquiries received by the Centre will become the primary information sources in the future.

Data Elements and File Size: The Centre presently maintains a bibliographic file of over 41,000 records and an automated auxiliary file of poisons. For each inquiry received by the Centre, a "call record" is made, recording the type of caller and urgency of the call; the species and number of animals affected; the toxic agents involved; bio-systematic codes for symptoms or lesions; antidotes or other treatments administered; and the response given to the inquirer. Records of similar cases may thus be retrieved by the toxic or clinical signs, or by practitioner. A total of 1,485 inquiries were received during 1978 and 1979.

Processing Mode: C.N.I.T.V. uses a Digital PDP 11/03 computer for processing and retrieval of inquiry data, which are stored on discs. Floppy discs are being replaced by a hard disc unit. Programs were written in FORTRAN IV by the Centre Informatique de l'Institut Supérieur d'Agriculture Rhone-Alpes. Bibliographic data, formerly

stored in manual card files, are in the process of being added to the data bank.

Products and Services: Response to inquiries, received by telephone 12 hours every working day, involve searches of both bibliographic references to types of animal poisoning and toxicological data, including those compiled from records of previous related inquiries. In addition to written or telephone responses to inquiries, photocopies of pertinent case reports are supplied. The Centre also performs statistical analyses of the inquiry file, by toxin, species, and clinical sign. C.N.I.T.V. also provides a current awareness service to keep practitioners informed of new developments in animal toxicology, by means of its review publication, *Notes de Toxicologie Veterinaire*. Through its affiliation with the Ecole Nationale Veterinaire de Lyon, the Centre acts as a liaison between practitioners and the school's toxicological analysis laboratory. In this capacity, the Centre advises practitioners on how to conduct an investigation and how to take samples, and transmits the results in emergencies.

Publications: *Notes de Toxicologie Veterinaire*, first issued in 1980, is intended to inform veterinary practitioners of new facts and current problems in the field. It is available to persons who subscribe to the Centre's services.

Availability of Products and Services: The Centre accepts inquiries from subscribing veterinary practitioners by telephone and by mail. Although the Centre's primary users are practitioners, use by animal owners and human poison control centers is increasing.

Future Plans: The Centre plans to conduct large epidemiological inquiries into major toxicological problems, such as toxicity from acorns in cattle, and toxicity of convulsive poisons in domestic animals and wild animals. The Centre also hopes to use its computer capability to perform management information tasks for the toxicological analysis laboratory on the analyses performed for the Centre's participating practitioners. Other plans include offering seminars and advanced courses in animal toxicology.

Kenya

LAB-KE-072

**VETERINARY RESEARCH DEPARTMENT
(V.R.D. MUGUGA)**

Kenya, Veterinary Research Department
P.O. Box 32

Kikuyu
Kenya

Contact: W. N. Masiga, Director

Cable: VETRESORG Kikuyu

Mission and Function: Since its establishment in 1954, the Veterinary Research Department has served as a rinderpest reference laboratory. The Department maintains a data bank of information on this disease.

Types of Information Available: Epidemiologic and laboratory data are derived primarily from the Department's own records and reports of research in progress. The English-language data deal with animal health and disease and rinderpest in East Africa.

Processing Mode: Data are stored and retrieved manually.

Products and Services: Data are compiled in a printed periodical, delivered to users by mail.

Availability of Products and Services: Requests for the publication, which is available without restriction, should be submitted in writing to the Director of the Veterinary Research Department, P.O. Box 32, Kikuyu, Kenya. No fees are charged.

New Zealand

LAB-NZ-073

LABORATORY MANAGEMENT AND DISEASE SURVEILLANCE INFORMATION SYSTEM (L.I.S.)

New Zealand. Ministry of Agriculture and Fisheries
P.O. Box 2298
Wellington
New Zealand

Contact: G. H. Adlam, Director, Animal Health Division

Telephone: Wellington 720-367

Mission and Function: The Laboratory Management and Disease Surveillance Information System was established in 1973 to provide information for laboratory management, to indicate trends in disease occurrence in New Zealand, to monitor bovine abortions, and to provide an index to laboratory cases.

Types of Information Available: Epidemiologic, laboratory, and clinical data and statistics are derived from disease surveillance code sheets submitted by reporting laboratories. All of the numerical data in the data bank are derived from these primary sources, and concern only New Zealand. In addition to data on animal health and disease, laboratory management data, such as the number of examinations or tests performed, are included in the data bank.

Data Elements and File Size: Data elements recorded on each Code Sheet include numerical data and codes for the submitter; species, sex, age, and breed of the animals; month of gestation; types of examinations performed; summary of clinical or laboratory findings; and final diagnoses. On the average, 14 index postings are made for each record. Index terms are selected from a fixed vocabulary and from a list of numerical codes. Data may be retrieved by these codes. At the end of July, 1980, there were approximately 350,000 records in the data bank, dating from 1 April 1973. Approximately 50,000 records are processed each year, by means of weekly updates.

Processing Mode: Computer batch processing is used to retrieve data. An ICL 2980 mainframe is employed, with software developed specifically for the system. Data are stored on magnetic tape.

Products and Services: Both current and retrospective file searches are performed. Search results, in the form of computer printouts or magnetic tape, are delivered to users by telephone and mail. Searches are performed annually, and on request.

Availability of Products and Services: Only the staff of the New Zealand Ministry of Agriculture and Fisheries may have direct access to computer printouts, although outside organizations may receive summarized information from the data bank. Requests for information should be submitted in writing to the Director, Animal Health Division, MAF, P.O. Box 2298, Wellington, N.Z. Fees vary, but average NZ\$5.00 per report.

Future Plans: The possibility of publishing data from the system is being considered. Such a publication would be similar to the data published from the VIDA II system (see entry EPI-UK-051).

Norway

LAB-NO-074

HELSEKORT FOR KU (HEALTH CARD FOR COW)

Utstillingsplassen
2300 Hamar
Norway

Contact: Henrik Solbu, Boks 24, 1432 As-NLH, Norway

Telephone: 065-26028; or 02-940060 (Dr. Solbu)

Parent Organization: Landsradet for Husdyrkontrollen
NML, Boks 9066
Vaterland
Oslo 7
Norway

Mission and Function: The Helsekort for Ku data bank records all veterinary treatments administered to dairy cows in Norway. In addition to providing records for the use of farmers and veterinarians, the cards are used to compile data for calculating bulls' breeding value on the basis of disease resistance. Established in 1970, the system has been fully operational since 1976. Milk production data are recorded in a parallel system; these records can be linked with health data as necessary.

Types of Information Available: Numerical clinical and statistical data are collected for all milk-recorded cows in Norway. All data are derived from primary records maintained by herd owners and veterinarians.

Data Elements and File Size: Each record contains the dates of treatments, disease codes, and the cow's identifying number. Data are retrievable by farm number and cow number. Approximately 300,000 unit records are processed each year (one for each cow). The data bank currently contains about 2 million records, dating from 1970 to the present. It is updated eight times per month.

Processing Mode: Data are processed and retrieved by computer in both batch and on-line modes, and are stored on magnetic tape and disc. The system uses an IBM 3031 computer and software developed specifically for the data bank.

Products and Services: Current and retrospective file searches, as well as statistical analyses of the data, are provided monthly and annually. Information products and magnetic tape are delivered to users by mail. Numerical compendia are published. Milk recording services are also provided.

Publications: *Arsmelding fra Helsekortutvalget*, published annually since 1976, is available free of charge from NRF, Hamar, Norway.

Availability of Products and Services: Use of the data bank is restricted to owner organizations and scientific researchers approved by them. Fees may be charged, de-

pending upon the use that will be made of the data. To query the data bank, apply to the owner organizations. Descriptive materials are currently available in Norwegian; there are plans to provide English-language materials as well.

United Kingdom

LAB-UK-075

COMPTON SYSTEM FOR RECORDING EVENTS AFFECTING ECONOMICALLY-IMPORTANT LIVESTOCK (COSREEL)

Institute for Research on Animal Diseases
Compton, Newbury
Berkshire RG16 0NN
U.K.

Contact: J. M. Payne

Telephone: 0635 22 411

Parent Organization: Agricultural Research Council (United Kingdom)
Compton, Newbury
Berkshire RG16 0NN
U.K.

Mission and Function: COSREEL was established in 1976 to validate, store, and retrieve livestock life history records to meet the needs of herd managers, veterinarians, and scientists. Management events, clinical events, and lactation data are recorded for cattle at the Institute for Research on Animal Diseases, and are presently used for routine herd management and disease control actions. COSREEL is linked to a data base of meteorological records which is available on the same mainframe. These data may be analyzed in relation to COSREEL's livestock data.

Types of Information Available: Laboratory and clinical data, management event data, and performance data are collected from primary sources. The data pertain to approximately 2,000 cattle in five herds of the Institute for Research on Animal Diseases in south central England. Management events are recorded on data forms by stockmen. These events include breeding service, parturition, movement between premises, weight, experiment participation, and disposal. Clinical events include attention by a

veterinarian involving diagnoses, surgical or medical treatments, local or general symptoms, vaccinations, case progress assessments, experimental procedures, and tests on animals or samples including postmortem examinations and pregnancy diagnoses. These data are coded and entered by veterinary assistants. Milk yield data for all lactating cows are recorded and stored separately.

Data Elements and File Size: Stored records organized by biosystematic classification codes contain numerical data and coded descriptions of events in the life of each animal. Clinical and experimental data are coded by a comprehensive mnemonic alphanumeric in-house system. As of mid-1980, the data bank contained approximately 100,000 records, dating from 1971 to the present. Approximately 10,000 records are processed each year. Data are usually entered three times per week.

Processing Mode: The data bank is maintained on an ICL 470/472 mainframe located at the Rothamsted Experimental Station in Harpenden. Batch and on-line processing and retrieval are carried out remotely via a private telephone line. The Institute maintains teletype and video display units and Centronics 101A and Dacoll Centronics 703 printers. Input data are stored initially on disc, then transferred after validation to magnetic tape. Reference files of all permitted codes are accessed during the storage sequence to validate the input data. System software was developed within the Institute.

Products and Services: Printouts of current and retrospective file searches and statistical analyses are produced via teletypewriters, interactive terminals, and serial printers. Although specific searches are performed on request, various routine searches are produced weekly. These searches include inventory listings, analyses of lactation performance, and anticipated calvings, as well as weekly action lists for farm and veterinary staff members (for example, pregnancy tests to be performed). Whenever an animal's life history is updated, a copy is printed and filed so that the information is readily available without a computer search.

Availability of Products and Services: Services are intended for the management and research staff at the Institute, although external researchers use COSREEL occasionally. No fees are charged. Requests should be submitted to A. M. Russell at the Institute, with an explanation of requirements. Limited descriptive material is available in English.

Future Plans: Coverage of COSREEL will be extended to more herds and veterinary practices in southern England. Records for sheep, goats, and pigs will be loaded into the data bank within a year. It is hoped that data from COSREEL will be used in the future to simplify the selection

of animals for experimentation, and to provide epidemiological analyses for guidance in planning research.

United States

LAB-US-076

AMERICAN VETERINARY MEDICAL DATA PROGRAM (AVMDP)

Association of Veterinary Medical Data Program Participants

College of Veterinary Medicine

Cornell University

Ithaca NY 14853

U.S.A.

Contact: Howard Moraff, Program Director

Telephone: (607) 256-7687

Mission and Function: The mission of the American Veterinary Medical Data Program is to maintain a repository of basic standardized medical data on animal patients seen at veterinary teaching hospitals in North America. The program, established in 1964, provides data search and retrieval services to researchers, educators, administrators, and practitioners. The program is currently involved in a three-year start-up period as a privately run operation.

Types of Information Available: The data base contains numerical data that abstract records of patient visits to veterinary school clinics. Data are collected from 18 clinics within the United States and Canada: Auburn University, University of California at Davis, Colorado State University, University of Georgia, Iowa State University, University of Illinois, Purdue University, Kansas State University, Louisiana State University, Michigan State University, University of Minnesota, Mississippi State University, University of Missouri, Ohio State University, University of Guelph, University of Saskatchewan, University of Tennessee, and Texas A and M University.

Data Elements and File Size: Data included in each record submitted to the AVMDP consist of the institution, patient number, sex, breed or species, age, weight, diagnosis, surgical procedures, non-diagnostic procedures, diagnostic procedures, length of hospital stay, date of discharge, and attending clinician. Data are coded numerically according to the *Standard Nomenclature of Veterinary Diseases and*

Operations (SNVDO), 2nd ed., abridged (Washington, D.C.: National Institutes of Health, U.S. Department of Health, Education, and Welfare, 1976). Summary data may be retrieved by breed, species, geographic location, specific disease, type of operation, etc. Information on specific patients is not available. Approximately 2,000,000 records were in the data bank as of June 1980, with 250,000 added annually on a quarterly basis. The earliest record in the data bank is dated 1964.

Processing Mode: Data are generally received from the schools on magnetic tape. Manual methods and computer batch and on-line processing are employed for data processing and retrieval. The AVMDP uses an IBM 370/168 computer. Records are stored on magnetic tape. The system uses a software package developed in-house, which is available for use by others.

Products and Services: Retrieval services consist of current and retrospective file searches and statistical analyses of the current file. Information products, distributed by mail, include computer printouts and magnetic tapes containing summary data, newsletters, and periodic summary reports to the participating veterinary school clinics. Data are summarized in annual reports and on request. The program also offers consultation on organization and utilization of veterinary medical records, including assistance to participating schools in the application of computers to gathering, organizing, storing, and retrieving data from medical records; and data code standardization services.

Availability of Products and Services: Data are available on request from any agency or individual in support of veterinary medicine, including medical, veterinary, and medical records professionals. A fee schedule is available on request. Inquiries should be addressed to the program director.

Future Plans: Expanding the number of data items collected and increasing the number of participating veterinary schools are planned. The possibility of cooperating and coordinating with other data bank operations is being investigated.

LAB-US-077

ANIMAL PATHOLOGY INDEX

Johns Hopkins University. School of Medicine. Department of Pathology
Johns Hopkins Hospital
Baltimore MD 21217
U.S.A.

Contact: John D. Strandberg

Telephone: (301) 955-3334

Mission and Function: The Animal Pathology Index stores and retrieves information gained from animal autopsies for use in teaching and research.

Types of Information Available: Laboratory data are derived entirely from animal autopsy report forms used by the Department of Pathology. The data pertain only to necropsies performed by the Johns Hopkins University School of Medicine.

Data Elements and File Size: Each record is a description of the necropsy findings for an individual animal, containing identifying information about the animal (i.e., its species, breed, sex, and age), and "descriptors" which consist of a verbatim transcription of any unit of information comprising the autopsy report. These descriptors are stored in their original English-language form, and are not coded by any system or derived from any fixed vocabulary. On the average, approximately 15 descriptors are entered in each record. There were over 13,000 cases in the data bank as of mid-1980.

Processing Mode: Data are keypunched onto cards, then transferred to magnetic tape. A CDC model 3300 computer, with programs written in MANIPULATOR language, is used to generate the printed index. Data are stored on magnetic tape.

Products and Services: The system produces a printed cumulative concordance, in book form, of all diagnosis descriptors listed in alphabetical order. Each descriptor (i.e., diagnosis) is accompanied by a listing of the autopsy numbers of the cases involved. The listing of autopsy numbers is arranged by species. The original autopsy record and microscopic slides may then be consulted. Even in instances where the use of natural-language descriptors causes variations in the terminology of diagnoses, most related conditions file near each other in the concordance and in its table of contents. Special correlative studies may be generated by the computer, such as co-incidence of various lesions, or all cases involving a single species or a single supplier.

Availability of Products and Services: The concordance is made available in multiple copies, for distribution to staff members or departmental libraries. The Animal Pathology Index is described by Samuel H. Paplanus, John D. Strandberg, and Richard H. Shepard in "A Computer-Based Means of Storage and Retrieval of Veterinary Pathology Diagnosis without Numerical Coding," published in *Laboratory Animal Care*, 20(6):1123-1130, 1970. Contact Dr. Strandberg for information on availability of autopsy records and slides.

LAB-US-078

**ANIMAL TOXICOLOGY HOTLINE
(TIIS—TOXICOLOGY INFORMATION AND INVESTIGATION SERVICE)**

University of Illinois. College of Veterinary Medicine
Urbana IL 61801
U.S.A.

Contact: William B. Buck, Professor of Veterinary Toxicology

Telephone: (217) 333-3611

Funding Organization: Illinois. Department of Agriculture
Springfield IL 62706
U.S.A.

Mission and Function: The Animal Toxicology Hotline was established in 1978 to provide information, consultation, and investigation of animal poisoning and chemical contamination.

Types of Information Available: The Animal Toxicology Hotline collects bibliographic, research, laboratory, clinical, and epidemiologic data from both primary and secondary sources of information on animal health and disease and environmental contamination and quality. These data, obtained from nationwide sources in English, are consulted in response to inquiries received from practicing veterinarians, county agricultural extension advisers, and animal owners within the U.S.A. and, on occasion, foreign countries.

Data Elements and File Size: Data are accessible by subject.

Processing Mode: Processing, retrieval, and storage of records are entirely manual. Data are stored on cards.

Products and Services: The file is searched in response to inquiries, to determine toxicity and recommended antidotes to toxic materials. Inquiries are tabulated and analyzed to determine incidence by species and substance. The data bank is accessed as necessary when requests are received; queries are answered by telephone. In situations where telephone advice and consultation seem inadequate, field investigations will be made within the state of Illinois by a toxicologist, a pathologist, and a veterinary clinician.

Availability of Products and Services: Requests for services should be directed to the Hotline by telephone. Services are free to anyone seeking information concerning suspected or potential poisoning or chemical exposure of animals. Descriptive material is available in English.

Future Plans: Plans are being made to install an "800" telephone number (free to the dialing party) and to expand the card file to 30,000 or more chemicals, listing their toxicity to animals and treatment recommendations in case of exposure or toxicosis. Eventually, the entire collection of data will be placed on computers so that predictive information may be provided to livestock and poultry producers, and problems of chemical contamination may be alleviated as they occur.

LAB-US-079

CLINTON PATHOLOGY UNIT

New Jersey. Division of Fish, Game, and Wildlife. Clinton Pathology Unit
Box 409, RD
Hampton NJ 08877
U.S.A.

Contact: Douglas E. Roscoe

Telephone: (201) 735-8793

Mission and Function: The report file of the Clinton Pathology Unit was established in 1977 to document wildlife diseases in New Jersey.

Types of Information Available: Epidemiologic, laboratory, and statistical data are derived from regional wildlife necropsy reports prepared by the Unit.

Data Elements and File Size: Each stored record consists of the necropsy report and accession number. There are two methods of access: chronologically by accession number, or by species. Approximately 200 records are added each year. Records date from 1977 to the present.

Processing Mode: Data are stored and retrieved manually.

Products and Services: The file of reports will be searched on request to answer questions; photocopies of the necropsy reports are available. Search results may be obtained by mail or telephone.

Availability of Products and Services: Retrieval services are generally available without charge. Write or telephone the Director of the Clinton Pathology Unit.

LAB-US-080

FISH DISEASE CONTROL CENTER

United States. Fish and Wildlife Service. Fish Disease Control Center

P.O. Box 252
Genoa WI 54632
U.S.A.

Contact: James W. Warren

Telephone: (608) 689-2121

Mission and Function: The data bank of the Fish Disease Control Center was established in 1965 as a case history file on the epizootiology of fish diseases in the U.S.A. and Canada.

Types of Information Available: Epidemiologic, laboratory, and clinical data are collected from fish disease case histories from the U.S.A. and Canada. Ninety percent of the material in the data bank is derived from primary sources, and 10 percent from secondary sources. In addition to fish disease, the data bank is concerned with environmental and nutritional aspects of fish health.

Data Elements and File Size: Each stored case history is accessioned and assigned subject descriptors and biosystematic classification codes. On the average, 20 index postings are assigned per unit record. Index terms are selected from a fixed vocabulary or, secondarily, are comprised of keywords taken from the text of the record. Data may be accessed by subject, geographic area, species, fish disease, or seasonal occurrence. The data bank presently contains 7,350 records, dating from May, 1953, to December 1972. File updates vary in frequency and volume.

Processing Mode: Data are stored on and retrieved by means of optical coincidence McBee Keydex punched cards. The system uses Keydex equipment, model 75-010-01.

Products and Services: Retrospective searches of the file are performed on request; search results are reported by telephone and mail.

Availability of Products and Services: The Fish Disease Control Center accepts requests for information by telephone. Services are generally available; no fees are charged.

Future Plans: As staff capability and funds permit, more case histories will be indexed for the data bank.

LAB-US-081

FISH PATHOLOGY DATA BANK

Pennsylvania. Fish Commission
Box 200-C
Bellefonte PA 16823
U.S.A.

Contact: James E. Harvey, Fisheries Biologist

Telephone: (814) 355-4837

Mission and Function: The Fish Pathology Data Bank was established in 1956 to advance the prevention of fish disease.

Types of Information Available: Epidemiologic, laboratory, and statistical data are derived from case histories compiled during fish disease investigations conducted by the Pennsylvania Fish Commission. Data pertain to all species of fish found within the state.

Data Elements and File Size: Stored records contain information on disease pathogens; affected species; environmental data, such as water temperature; number of fish affected; etc. Data are retrievable by date of disease occurrence and location. Approximately 250 case histories are processed each year. The file is updated daily.

Processing Mode: The file is searched and maintained manually.

Products and Services: Current and retrospective file searches are provided on request. Monthly and annual tabulations are prepared, and distributed by mail or telephone.

Availability of Products and Services: Requests for services are accepted by mail or telephone. Services are available without restriction; no fees are charged.

Future Plans: The possibility of automating the data bank and adding a computer terminal is being investigated.

LAB-US-082

FLORIDA BUREAU OF DIAGNOSTIC LABORATORIES. VETERINARY MEDICAL SYSTEM

Florida. Department of Agriculture and Consumer Services.
Bureau of Diagnostic Laboratories
P.O. Box 460
Kissimmee FL 32741
U.S.A.

Contact: H. L. Rubin, Chief

Telephone: (305) 847-3185

Mission and Function: The Veterinary Medical System was established to record the receipt of specimens by the five diagnostic laboratories of the state of Florida and to report the test data obtained by the laboratories. Established in 1981, the system is only partially operational,

but is planned to link the Kissimmee, Live Oak, Dade City, Cottontale, and Miami Springs Diagnostic Laboratories. **Types of Information Available:** Laboratory data are reported for every specimen submitted to one of the diagnostic laboratories. Data pertain to the state of Florida exclusively. Two subsystems are maintained: one records data from routine laboratory testing, the other from tests for swamp fever in horses.

Data Elements and File Size: Stored records include the laboratory's accession number for the specimen; the date the specimen was received; name of the submitting veterinarian; name of the animal's owner; county of origin; the number of animals affected; species, age, and sex of the animal(s); the specific test requested; dates of preliminary and final reports; the coordinating laboratory veterinarian; and the test results. Data may be retrieved by geographic location or by disease. After approximately six months of operation, there are between 38,000 and 40,000 records in the system. An estimated 65,000 to 70,000 records are expected annually. The system is updated continuously. **Processing Mode:** Data are processed on-line, and may be retrieved on-line or by batch processing. The Veterinary Medical System operates on a Sperry Univac 1100/60. The individual laboratories have UTS 400 terminals and printers. The system's software was developed in-house, and is available for use by other laboratory systems.

Products and Services: Reports may be prepared on demand. Monthly batch reports are tabulated by geographic area and by disease.

Availability of Products and Services: Data will be made available on request. No fees are charged, although costs involved in responding to time-consuming queries will be recovered.

Future Plans: The system will be expanded to include all five laboratories. It will also be adapted to permit retrieval of more specific information.

LAB-US-083

GEORGIA VETERINARY DIAGNOSTIC AND INVESTIGATIONAL LABORATORY (VDIL)

P.O. Box 1389
Tifton GA 31793
U.S.A.

Contact: Harvey S. Gosser, Director

Telephone: (912) 386-3340

Parent Organization: University of Georgia
Athens GA 30602
U.S.A.

Funding Organization: Georgia. Department of Agriculture

Mission and Function: The Veterinary Diagnostic and Investigational Laboratory has, since 1974, maintained a data bank of the animal disease diagnoses and tests that it has performed.

Types of Information Available: Laboratory data are compiled for every sample, specimen, or case submitted to VDIL by veterinarians or animal owners in the state of Georgia.

Data Elements and File Size: Each stored case report contains identifying information about the specimen, including the name of the owner and submitting veterinarian; the type and number of specimens received; the type and number of tests run, and their results; and diagnosis. The data bank may be searched by any variable, such as the species, age, or sex of the animal, the diagnosis, etc. As of mid-1980, there were 78,000 records in the data bank; the earliest record is dated 1975. The data bank, updated monthly, is growing at the rate of 16,000 records each year.

Processing Mode: Data are processed and retrieved by computer batch processing, using the facilities of the University of Georgia Computer Center. Records are stored on magnetic tape and punched cards. The system uses software developed specifically for it; this software may be made available to other laboratories with similar requirements.

Products and Services: VDIL provides both current and retrospective file searches. Monthly reports and annual cumulations are submitted to the State Veterinarian and other interested officials. These reports tabulate the number of cases submitted from each county, for each affected species; and the number of tests and diagnoses by species. Search results are delivered to users by mail.

Availability of Products and Services: VDIL places no restrictions on its summary data. No fees are charged.

Future Plans: The Laboratory hopes to develop an on-line data storage system that would be available for daily usage.

LAB-US-084

INTERNATIONAL SPECIES INVENTORY SYSTEM (ISIS)

Minnesota Zoological Garden
12101 Johnny Cake Ridge Rd.
Apple Valley MN 55124
U.S.A.

Contact: Nathan Flesness, ISIS Project Director

Telephone: (612) 432-9010

Mission and Function: The International Species Inventory System contains both inventory data and physiological data on exotic animals maintained in zoos, primate centers, and related facilities. The Laboratory Data Subsystem was established to provide a mechanism and a focus for pooling clinical laboratory data collected from participating institutions and facilities, and for analyzing and disseminating the results. The system has been operational as a pilot project with eleven participating institutions since 1980. It will become fully operational in 1982.

Types of Information Available: Participating facilities submit normal clinical chemical and hematological data derived from tests performed on animals in their care. Currently, the Laboratory Data Subsystem contains data on mammals and birds; reptile and amphibian data are to be added shortly. Although zoo animals are obtained worldwide, the facilities participating in the pilot project have all been located in the U.S.A.

Data Elements and File Size: Results of 49 individual tests are included in the Laboratory Data Subsystem, consisting of hematology, differential, chemistry, electrophoresis, blood gases, and hormone test results. There are approximately 10,000 sets of results of analyses of blood samples in the subsystem; a set consists of results of at least one test on an animal. The sets of results are distributed among 296 species of birds and mammals. For 85 species, there have been at least 10 separate results reported for each specific test. These data, referred to as "normals," form the beginning of a statistically valid set of baseline data for zoo animals.

Processing Mode: Data, supplied to ISIS on paper forms by the participating facilities, are transferred to a computer for analysis. Input and retrieval are accomplished via batch processing with a CDC Cyber mainframe at the University of Minnesota. ISIS uses specially-developed software. Contact the ISIS Project Director for information on the availability of this software.

Products and Services: Summarized data are retrieved and distributed by mail once a year. The "normals" report summarizes data by species, and under each species by hematology, differential, chemistry, electrophoresis, blood gases, and hormones. Data that do not comprise the "nor-

mals" set are also retrievable by species. These data are less reliable but more comprehensive in their coverage of a variety of zoo animals.

Availability of Products and Services: Data are disseminated to the participating institutions and facilities. Other researchers may obtain the "normals" report for \$100.00. Contact ISIS for information on the cost and availability of the remaining data.

Future Plans: ISIS plans to increase the number of participants in its data collection endeavor, and hopes to include some European facilities among them. ISIS is also interested in collecting data on drugs used for immobilization, and on assay methods used to determine test results. Eventually, a detailed pathology and autopsy information system may be established.

LAB-US-085

IOWA STATE-FEDERAL ANIMAL HEALTH LABORATORY

Iowa. Department of Agriculture
Henry Wallace Bldg.
East 9th and Grand Ave.
Des Moines IA 50319
U.S.A.

Contact: C. H. Creamer, Laboratory Supervisor

Telephone: (515) 281-5861

Parent Organization: United States. Department of Agriculture

Mission and Function: The State-Federal Animal Health Laboratory, covering inspections conducted in the state of Iowa, serves as a repository of the reports from veterinary brucellosis serological tests and maceration flotation procedures for vector mites and ectoparasites performed by the Laboratory.

Types of Information Available: The data bank contains data drawn from brucellosis test results collected from laboratory and clinical reports. The content of the data bank is obtained from intra-state regions by state and federal animal health personnel.

Data Elements and File Size: Approximately 200,000 laboratory reports are currently in the data bank. Access to the data bank is through a subject index: the indexing vocabulary consists of keywords derived from the text of the report.

Processing Mode: Processing, retrieval, and storage of records are conducted manually.

Products and Services: Searches of the current files, laboratory forms, and periodic reports are provided, and delivered to users by mail. Output is produced monthly, and reports are compiled every two years. Additional services consist of telephone and personal reports made on request.

Availability of Products and Services: Requests for services should be addressed to the laboratory supervisor. No fees are charged, but services are restricted to officials, veterinary professionals, and animal owners.

Future Plans: Plans are being made to accommodate proposed additional laboratory testing.

LAB-US-086

LABORATORY ANIMAL DATA BANK (LADB)

Battelle Columbus Laboratories
8330 Old Courthouse Rd.
Vienna VA 22180
U.S.A.

Contact: Richard Simon

Telephone: (703) 790-8980

Mission and Function: LADB is a resource of comparative laboratory animal baseline data. It contains data on hematology, clinical chemistry, growth, and pathology, as well as information on the environment and husbandry of various species and strains of laboratory animals. The data bank was originally established under contract to the National Library of Medicine in cooperation with several other agencies of the U.S. government, but is now maintained solely by Battelle Columbus Laboratories.

Types of Information Available: The data bank contains numerical and unpublished descriptive and biological baseline data obtained from research and testing laboratories in the United States and Canada. There are 75 such data contributors.

Data Elements and File Size: Data elements in each stored record consist of numerical data and baseline characteristics coded by biosystematic classification. The file is accessible by geographic location, by physiologic and biologic values, and by environmental or husbandry characteristics. There are currently over 1 million records in the data bank, dating from 1965 to the present.

Processing Mode: Computer batch and on-line processing are used for processing and retrieval, with CDC Cyber equipment. Standard, proprietary, and BASIS software packages are used.

Products and Services: Retrieval services include on-line and off-line access and statistical analyses of the data. Users may also print out data as distributions, such as histograms or data tables. Information products consist of computer printouts and a newsletter, which are delivered to users by mail. Output is provided on demand. User training is also available.

Availability of Products and Services: Requests for services should be submitted to Battelle. A user agreement is necessary. LADB currently has approximately 100 organizational users. Off-line search service ranges from \$50.00 to \$300.00; on-line computer access costs \$20.00 per connect hour. Descriptive material is available in English.

Future Plans: There are plans to develop a laboratory animal reference file with information on origin and characteristics of various species and strains, and a file of animal models of human diseases which will permit searching by pathologic changes and clinical signs and symptoms rather than solely by human disease prototype. Inclusion of data for animals used as controls in interaction experiments (for example, the effect of certain substances on carcinogenicity of test compounds) is also being considered.

LAB-US-087

MASSACHUSETTS LARGE ANIMAL DIAGNOSTIC LABORATORY

University of Massachusetts. Paige Laboratory
Amherst MA 01003
U.S.A.

Contact: Allan A. Vogel, Director

Telephone: (413) 545-2427

Mission and Function: The Large Animal Diagnostic Laboratory maintains a collection of laboratory diagnostic information. The collection was established in 1955.

Types of Information Available: Numerical laboratory data on animal health and disease in the state of Massachusetts are derived from the Laboratory's records of tests performed on specimens submitted by practicing veterinarians.

Data Elements and File Size: Each unit record consists of data pertaining to a single accession, which can range

from a sample to an entire animal. Records contain the names of the owner and veterinarian, owner's address, herd history (the number of animals sick or dead), symptoms, tests performed, and results. There is one index posting per record: the diagnosis. Data are accessible by owner and species. There were 9,100 records in the collection in mid-1980, dating from 1955 to the present. Approximately 600 records are processed each year, in monthly updates. **Processing Mode:** Data are processed and retrieved manually, and are stored in manual files.

Products and Services: Retrieval services provided by the Large Animal Diagnostic Laboratory include searches of the current file, as well as retrospective searches. Monthly tabulations of the number of cases of a specific disease are produced. Summary data are also compiled in an annual report, which tallies all testing by species and by disease. **Availability of Products and Services:** Data from the annual report are available to anyone on request. These are summary data that do not identify individual owners.

LAB-US-088

MICHIGAN ANIMAL DISEASE-TOXIC SUBSTANCE INFORMATION SYSTEM

Michigan. Department of Agriculture. Consumer Protection Bureau

P.O. Box 30017
Lansing MI 48909
U.S.A.

Contact: Ken Van Patten, Assistant Bureau Director; or Fred Heiner, Chief, Methods Management Division

Telephone: (517) 373-1052; or 373-1102

Mission and Function: The Animal Disease — Toxic Substance Information System records all animal diseases and data on toxic substances that must be monitored as part of the Michigan Department of Agriculture's responsibility for protecting the wholesomeness and purity of public food supplies in the state. In particular, the system is designed to assist in eliminating undesirable effects of PBB in Michigan, pursuant to a 1977 state law, the "PBB Testing Law."

Types of Information Available: The Master History File contains data obtained during the 1973 PBB outbreak incident, including information on placental transmission of PBB from dam to calf, and PBB occurrence in individual animals, animal products, eggs, dairy products, water, wells, etc. The Dairy Farm Producer Record File contains bacteria

counts, antibiotic residues, and somatic cell count test records for various milk producers. The Food Processing and Plant Inspection Records File includes information gathered from meat, dairy, and canning plants. The Master Client File contains names, addresses, and cross references to various farmers, feed lot operators, greenhouse operators, and other users of pesticides that affect meat, milk, and milk-derived substances.

Data Elements and File Size: The Master History File contains over 250,000 records on individual animals and animal products exposed to PBB. The Master Client File contains 90,000 records. Specific drugs, pesticides, and organic or inorganic materials are searchable by identification number, Chemical Abstracts Service (CAS) Registry Number, or name. Diseases or substances are accessible by the particular species or part of the body that they affect.

Processing Mode: The system uses Burroughs 7800 hardware and COBOL and RPG languages.

Products and Services: Test results of data on specific substances may be retrieved on demand.

Availability of Products and Services: Data will be made available to qualified researchers.

LAB-US-089

MISSISSIPPI EXTENSION WILDLIFE AND FISHERIES

Mississippi State University
P.O. Box 5405
Mississippi State MS 39762
U.S.A.

Contact: Thomas L. Wellborn, Leader

Telephone: (601) 325-3174

Mission and Function: The Extension Wildlife and Fisheries data bank has, for ten years, collected records of fish diseases in Mississippi. The data bank emphasizes those diseases resulting in fish kills in commercial fisheries.

Types of Information Available: Epidemiologic, laboratory, clinical, and statistical data are collected in numerical and photographic form. Data, derived entirely from the extension service's field and laboratory investigations, pertain only to fish disease in the state of Mississippi.

Data Elements and File Size: Records contain the name of the fish farmer or agency affected; geographic location of the body of water; name of the body of water (public water) or pond number (private water); kinds of fish present; numbers and species of fish involved in the kill; nor-

mal feeding activity and stocking rate; various relevant water quality parameters; general clinical signs associated with moribund fish; parasitological data; etc. Data are retrievable by case number. Records date from September 1969 to the present. The file is updated daily.

Processing Mode: Records are stored and retrieved manually.

Products and Services: Reference service is provided; information is supplied by mail.

Availability of Products and Services: Submit queries to Extension Wildlife and Fisheries. No fees are charged.

Future Plans: It is hoped that future computerization will permit retrieval and analysis of data by disease, location, individual farmer, and similar parameters.

LAB-US-090

MONTANA VETERINARY DIAGNOSTIC LABORATORY

P.O. Box 997
Bozeman MT 59715
U.S.A.

Contact: William J. Quinn, or J. A. Bergeron

Telephone: (406) 586-5952

Parent Organization: Montana. Department of Livestock
Capitol Station
Helena MT 59601
U.S.A.

Mission and Function: The Montana Veterinary Diagnostic Laboratory has, since 1970, maintained records on animal disease diagnoses.

Types of Information Available: The data are derived from the Laboratory's diagnostic case records and necropsy records, and pertain exclusively to specimens submitted to the Laboratory from within the state of Montana.

Data Elements and File Size: The file of records grows at the rate of about 5,000 items per year, and is updated daily. Each stored record is coded and accessible by subject.

Processing Mode: Records are stored and retrieved manually.

Products and Services: Upon request, the file of case reports will be searched to provide information, such as summary statistics, to interested persons.

Availability of Products and Services: Requests, in writing,

are accepted from members of organizations interested in livestock or animal disease. Information is provided without charge.

Future Plans: It is hoped that the records will eventually be processed by computer.

LAB-US-091

NEW YORK DIAGNOSTIC LABORATORY DATA BANK

New York State College of Veterinary Medicine. Diagnostic Laboratory
P.O. Box 786
Ithaca NY 14850
U.S.A.

Contact: Raymond Cypess, Director of Laboratory; or Anne Bregy Saltman, for data bank inquiries

Telephone: (607) 256-6541

Parent Organization: Cornell University
Ithaca NY 14850
U.S.A.

Funding Organization: New York (State). Department of Agriculture and Markets. Division of Animal Industry Building 8
State Campus
Albany NY 12235
U.S.A.

Mission and Function: The Diagnostic Laboratory Data Bank was established in 1976 to store and retrieve data related to samples and specimens received for laboratory diagnostic support. The information is used for billing, and for retrieval of data from test results for diagnostic consultation. The data are potentially useful for epidemiologic research.

Types of Information Available: The data are derived from case records that are established as soon as a sample or specimen is received from a veterinarian. Each record is updated as the laboratory diagnosis proceeds. A case is considered to be anything received from one veterinarian; it could apply to a single animal or entire herd. Samples or specimens are accepted from throughout the USA and Canada.

Data Elements and File Size: Data elements included in each case record are the name, address, and account number of the veterinarian; name of the client or owner; the

animal's registration number or name; species, breed, age, and sex of the animal; case history of the animal; test requested; and test results. If tests are requested prior to exporting an animal, the country of destination is also included in the record. Records are retrievable by any of these data elements. Data entered into case records are coded with an in-house coding system; laboratory results or diagnoses are coded in accordance with the *Standard Nomenclature of Veterinary Diseases and Operations*, 2nd ed., abridged (Washington, D.C.: National Institutes of Health, U.S. Department of Health, Education, and Welfare, 1976). Approximately 54,000 records are added to the data bank annually; it is updated daily. Records date from 1976 to the present.

Processing Mode: The data bank employs on-line computer processing, with a Digital PDP 1145 computer. Records are stored on magnetic tape and disc. Software was developed in-house.

Products and Services: Current and retrospective file searches and statistical analyses are performed. Direct on-line access, controlled by a password system, is available to the Laboratory's personnel. Search results may also be delivered in the form of computer printouts and magnetic tapes.

Availability of Products and Services: Although the data are not published, since the data bank is used primarily for billing, requests for summary data will be answered. No fees are charged. Inquiries should be addressed to Ms. Saltman.

LAB-US-092

NEW YORK FISH DISEASE CONTROL CENTER

8314 Fish Hatchery Rd.
Rome NY 13440
U.S.A.

Contact: John H. Schachte, Jr., Associate Fish Pathologist

Telephone: (315) 337-0910, or 337-0988

Parent Organization: New York (State). Department of Environmental Conservation
50 Wolf Rd.
Albany NY 12233
U.S.A.

Mission and Function: The mission of the data bank is to collect data concerning the epizootics of disease in fish

in New York State hatcheries, and data on breeding for disease resistance and diet comparisons. The data bank, established in 1933, is in full operation.

Types of Information Available: Epidemiologic and statistical data are derived from case records and reports of field investigations conducted by the Fish Disease Control Center.

Data Elements and File Size: Case records include the accession number of the case; the hatchery affected; date of receipt or visit to hatchery; age, species, and size of fish; extent of the disease (mild, moderate, or severe), and the extent of the outbreak (a single lot or an entire hatchery); type of sample (live, frozen, or ice preserved); results of post mortem examination of organs; description of the gross pathology; bacteriological examination; test results; presumptive identification of causative organism; diagnosis; and recommendations. Records are currently accessible chronologically; older records were accessible by hatchery. The data bank is updated once a month.

Processing Mode: Processing, retrieval, and storage of records are accomplished manually.

Products and Services: Reports are compiled from the data bank. Although services to outside researchers are limited because of insufficient staff time, the case records may be consulted on site.

Availability of Products and Services: Requests for access to the data should be directed to Dr. John H. Schachte, Jr. No fees are charged.

LAB-US-093

NEW YORK ZOOLOGICAL SOCIETY

Bronx Zoo
185th St. and Southern Blvd.
Bronx NY 10460
U.S.A.

Telephone: (212) 220-5161

Mission and Function: For 10 years, the New York Zoological Society has maintained a data bank to preserve data and material concerning zoo animals.

Types of Information Available: Data are derived from laboratory and clinical reports, photographs, tissues, and slides. Data pertain only to the New York Zoological Society's animal holdings.

Data Elements and File Size: Stored records consist of clinical pathology reports and necropsy records. Information contained within each record consists of the animal's

taxonomic identification, age, sex, clinical history, and gross pathological and histological findings. Records are accessible chronologically. There were approximately 18,000 records in the data bank as of mid-1980, dating from 1902 to the present. Only those records added within the past 10 years have been accompanied by tissues and slides. The data bank grows at the rate of 1,500 records annually, added by weekly updates.

Processing Mode: The data bank is maintained manually. **Products and Services:** Although no data are compiled on a regular basis, the file will be searched on demand to provide answers to specific questions. Photocopies of individual records will be supplied in response to queries.

Availability of Products and Services: Services will be made available only in response to formal application from a qualified scientist. No fees are charged.

LAB-US-094

OREGON VETERINARY DIAGNOSTIC LABORATORY

Oregon State University. Veterinary Diagnostic Laboratory
Box 429
Corvallis OR 97330
U.S.A.

Contact: John A. Schmitz, Director

Telephone: (503) 754-3261

Mission and Function: The data bank was established in 1975 to store diagnoses of diseases of animals in Oregon and the northwestern region of the United States. It is currently in full operation.

Types of Information Available: The data bank collects numerical and graphic data from primary testing records pertaining to specimens submitted to the Laboratory.

Data Elements and File Size: Data elements included in each stored record consist of the specimen's identifying number and codes for the species and types of tests performed, including bacteriologic, virologic, biopathologic, histopathologic, parasitologic, and serologic tests. Data are summarized according to type of test and diagnosis by species. The data bank is updated monthly.

Processing Mode: Computer batch processing is used for processing and retrieval. Magnetic tape is used for storage.

Products and Services: Retrospective file searches are provided. Information products consist of computer printouts of summary data and published numerical compendia,

which are delivered to users by mail. Products are generated monthly.

Publications: Annual activity summaries may be obtained from the Laboratory.

Availability of Products and Services: Requests for services should be sent to the Director. Services are generally available for varying fees, depending upon the nature of the request and the resulting computer center charges.

LAB-US-095

PENNSYLVANIA BUREAU OF ANIMAL INDUSTRY (BAI)

Pennsylvania. Department of Agriculture. Bureau of Animal Industry
2301 N. Cameron St.
Harrisburg PA 17110
U.S.A.

Contact: Robert Mackrides, EDP Manager

Telephone: (717) 787-1413

Mission and Function: The Bureau of Animal Industry has, since 1975, maintained a data bank containing animal health history records, in support of the Bureau's responsibility for issuing health certificates for all animals sold or bought in the state of Pennsylvania.

Types of Information Available: Numerical data are derived from testing records submitted by practicing veterinarians and the state diagnostic laboratory. Although cattle records are emphasized, data pertaining to other animals are also included in the data bank.

Data Elements and File Size: Unit records include the veterinarian's name, owner's name, the number of animals in the herd, the number of animals tested, the animals' names or eartag numbers, and the number of animals whose tests indicated positive or negative results for specific diseases. Data are accessible by disease, geographic location, project code, file code, and record code. The data bank contains records dating from 1960 to the present. It is updated seven times per week. Approximately 60,000 records are added annually.

Processing Mode: Data are processed and retrieved manually, with punched cards, and by computer in both batch and on-line modes. Data are stored in manual files, and on punched cards, magnetic tape, and disc. The data bank currently uses a Univac 1180 computer and standard software packages.

Products and Services: Searches of the current file are provided, and on-line access is available daily. Search results, available on computer printouts or magnetic tape, are delivered by mail or interactive terminal.

Availability of Products and Services: Tabulated data will be made available to researchers on request. New computer hardware is expected to improve access to the data. No fees are charged. Descriptive material is available in English.

LAB-US-096

PRIMATE INFORMATION MANAGEMENT SYSTEM (PRIME)

Oregon Regional Primate Research Center
505 N.W. 185th Ave.
Beaverton OR 97005
U.S.A.

Contact: Robert W. Coffin, Director of Data Processing

Telephone: (503) 645-1141, ext. 328 or 329

Funding Organization: National Institutes of Health. Division of Research Resources. Animal Resources Branch
Bethesda MD 20014
U.S.A.

Mission and Function: The Primate Information Management System (PRIME) provides basic health care and research information on approximately 2,500 primates at the Oregon Regional Primate Research Center. The system was established in 1964.

Types of Information Available: Animal medical histories contain laboratory and clinical data on the local primate colony. In addition to information on primate health, management data and research project information relating to animal utilization are collected.

Data Elements and File Size: Unit records contain, as appropriate, the following types of information: animal management information, including a record of birth or acquisition, death or departure from the institution, transfer within the institution, research project to which the animal is assigned, and routine weighing and tuberculosis testing data in conformance with import and export regulations; laboratory and clinical information, including hematology, bacteriology, parasitology, radiology, clinical biochemistry, and urinalysis; surgical information, including minor surgeries and procedures, major surgical procedures, and surgical implantations; pathology information, including ana-

tomical post mortem diagnosis, a record of all organs examined post mortem, organ weights, and a record of distribution of tissues both within the institution and outside; and reproductive information, including records of menstruation of breeding females, mating, and confirmation of pregnancy and its outcome. Data are retrievable by specific event or parameter. There were 10 million records in the data bank in mid-1980, ranging in date from 1960 to the present. Daily on-line updating adds 10,000 records to the data bank each year.

Processing Mode: Data are processed and retrieved on-line, and are stored on magnetic tape and disc. The system uses "PRIME-550" hardware, with both standard software packages and software developed within the Research Center. Software developed by the Center will be made available to systems with similar requirements.

Products and Services: Retrieval services provided on request by PRIME consist of current and retrospective file searches and statistical analyses. On-line access is available. Information products, in the form of computer printouts, are delivered by mail or via interactive computer terminals. PRIME also offers consultation on retrieval methods.

Availability of Products and Services: Services are intended for the staff of the Research Center, but would be made available to outside users with an established interest and need for access.

LAB-US-097

REGISTRY OF VETERINARY PATHOLOGY

United States. Armed Forces Institute of Pathology
Washington DC 20306
U.S.A.

Contact: Sidney R. Jones, Registrar

Telephone: (202) 576-2601

Parent Organization: American Registry of Pathology

Funding Organization: American Veterinary Medical Association

Mission and Function: The Registry of Veterinary Pathology was established in 1944 to stimulate and promote development and research in veterinary pathology by establishing, maintaining, and expanding a collection of pathologic materials from animals; by providing training materials

for veterinary pathologists and other qualified persons; and by providing access to the collection for study, teaching, and research. It serves as a consultation center for veterinary and medical pathologists who provide diagnostic veterinary pathology services to practicing clinicians throughout the United States.

Types of Information Available: The Registry contains specimens, photographs, and pathologic diagnostic data on diseases of animals. Epidemiologic, laboratory, and clinical data are derived from cases submitted by veterinary or medical pathologists. The greatest number of cases represented in the Registry are canine species, with rodents also presenting a substantial number of cases. Other species include avian, bovine, equine, feline, ovine-caprine, porcine, reptile, nonhuman primate, and fish species, as well as zoo and wild animals.

Data Elements and File Size: Cases and accompanying materials, including necropsy specimens, histologic slides, and photographs of gross specimens, are added to the Registry when the consultation diagnosis has been made and reviewed by a resident in veterinary pathology and two certified veterinary pathologists. Records are accessible by disease entity, species, and pathologic subject. At the end of 1979, there were 52,596 cases in the Registry; 2,950 had been added in 1979.

Products and Services: The Registry provides consultative diagnoses, study sets of pathologic materials, a slide seminar, and courses in pathology. Inquiries, such as questions regarding pathologic techniques, will be answered. An additional service consists of on-site access to the collection for visiting professionals.

Availability of Products and Services: Services are available to veterinary and medical pathologists. No fees are charged. Requests for consultative diagnostic services are accepted only from pathologists, who then pass the results on to veterinary clinicians. Inquiries should be directed to the Registrar. The Registry's films and loan study sets of lantern and microscopic slides are included in the *List of Educational Aids* of the Armed Forces Institute of Pathology, and are made available by that agency's Loan Section.

LAB-US-098

RUTGERS POULTRY HEALTH LABORATORY

2569 E. Landis Ave.
Vineland NJ 08360
U.S.A.

Contact: Otto Schwabe, Director

Telephone: (609) 691-0360

Parent Organization: Cook College
Thompson Hall
New Brunswick NJ 08903
U.S.A.

Mission and Function: The mission of the Rutgers Poultry Health Laboratory's data bank is to collect diagnoses of poultry disease, as determined by the Laboratory in response to diagnostic work performed for poultry farmers, hatchery operators, feed companies, manufacturers of avian vaccines, and pigeon fanciers. The data bank has been in operation since 1930.

Types of Information Available: Epidemiologic and laboratory data on poultry disease are derived from testing and diagnostic records maintained by the Rutgers Laboratory. Data pertain to specimens accepted from throughout the U.S.A.

Data Elements and File Size: Data elements included in each stored record include the case number; date of receipt of a bird or specimen; mailing address of owner; the number of specimens from each species submitted; the strain and line of bird; age; size of the flock; method of housing; general appearance of flock; vaccination history; egg production; first symptoms noticed by owner; results of gross pathologic examination; results of bacteriologic, virologic, serologic, or histopathologic tests; diagnosis; and, if applicable, treatment recommendations. Data are accessible by disease, species, age, and geographic location. The data bank is updated once a year. Records date from 1940 to the present.

Processing Mode: Record storage and retrieval are performed manually.

Products and Services: The annual report, distributed by mail, contains tabulated data by disease, species, age, and geographic area. Certain contagious diseases are reported to state and federal authorities upon diagnosis.

Availability of Products and Services: Requests for information should be addressed to the Director. Services are available to any requester.

LAB-US-099

TENNESSEE VETERINARY MEDICAL INFORMATION SCIENCE (V.M.I.S.)

University of Tennessee. Veterinary Teaching Hospital
P.O. Box 1071, Neyland Dr.

Knoxville TN 37901
U.S.A.

Contact: Shelia A. Mulroy, Medical Records Administrator

Telephone: (615) 546-9230, ext. 224

Parent Organization: University of Tennessee. College of
Veterinary Medicine
P.O. Box 1071
Knoxville TN 37901
U.S.A.

Mission and Function: The VMIS data bank collects information on the diseases treated, operations performed, anesthesia employed, and clinicians attending animal patients at the University of Tennessee Veterinary Teaching Hospital. The system was established in 1977. It is a member of the Association of Veterinary Medical Data Program Participants, and supplies a quarterly magnetic tape of records to the American Veterinary Medical Data Program.

Types of Information Available: Numerical epidemiologic, laboratory, clinical, and statistical data are derived entirely from primary case records. Primarily an in-house data bank, the system records information on operative procedures, anesthesia used, and attending and consulting clinicians, as well as information on specific animal health and disease conditions.

Data Elements and File Size: Data captured from case abstracts include the animal patient's sex, species, age, weight, breed, date of discharge and length of stay, attending clinician, diagnoses, operations, and diagnostic procedures. There are approximately six such postings per record. The data bank contained 30,000 records as of mid-1980, dating from March 1977 to the present. Approximately 10,700 records are added annually, via weekly updates.

Processing Mode: Computer batch processing and manual methods are used for data processing and retrieval. Data are stored in manual card files and on magnetic tape and discs. Computerized data are processed with DEC System 10 equipment, utilizing software developed in-house.

Products and Services: Current and retrospective file searches are provided, as are statistical analyses of the current file. VMIS obtains monthly computer printouts of its data from the University's computer center.

Availability of Products and Services: Requests should be submitted to the Medical Records Administrator, who looks up the applicable codes and searches the printouts and manual indexes. Information from these files is generally available; no fees are charged.

Future Plans: VMIS would like to add direct data entry to its capabilities, in order to eliminate keypunching. It would also like to be able to store printouts on computer-output microfiche. If the American Veterinary Medical Data Program adopts direct data entry procedures, then VMIS would supply data to that organization's computer via telephone lines.

LAB-US-100

UNIVERSITY OF FLORIDA VETERINARY CLINICAL DATA RETRIEVAL SYSTEM

University of Florida. College of Veterinary Medicine
Box J-136
University of Florida
Gainesville FL 32610
U.S.A.

Contact: Michael J. Burrridge, Associate Professor of Epidemiology

Telephone: (904) 392-4756

Mission and Function: The University of Florida Veterinary Clinical Data Retrieval System was established in 1979 to provide rapid retrieval of veterinary clinical data on every animal patient seen at the University of Florida Veterinary Medical Teaching Hospital for the research, teaching, and administrative functions of the College of Veterinary Medicine.

Types of Information Available: The data bank contains detailed information on laboratory and clinical procedures transcribed from in-house medical records.

Data Elements and File Size: Stored records, transcribed onto a Veterinary Medical Case Abstract form, include the patient number, referral status, ownership status, species, breed, sex, age (either exact or inexact), weight, coat color, location of residence by zip code, attending clinician, entry and discharge dates, discharge status, diagnoses, diagnostic procedures used, operations performed, and data on non-diagnostic cases (such as normal examinations). Approximately 30 of these fields are entered for each record. All diagnoses and operations are coded by the *Standard Nomenclature of Veterinary Diseases and Operations*, 2nd ed., abridged (Washington, D.C., National Institutes of Health, U.S. Department of Health, Education, and Welfare, 1976). The exact value of the result of individual diagnostic techniques as well as the number of techniques

used are recorded. Data may be retrieved by the following parameters: patient number, species, breed, sex, exact age, inexact age, weight, coat color, location of residence, attending clinician, entry date, discharge date, discharge status, diagnosis, diagnostic procedure, operation, and non-diagnostic case. The searcher may specify a range of values pertaining to any parameter. Approximately 6,000 records will be added to the system each year. The earliest record is dated January 12, 1978. The data bank is updated continuously.

Processing Mode: The data bank is operated in a batch and on-line mode for input and retrieval, on an Amdahl 470 mainframe computer, with Teleray 1061 and NCR 796/401 terminals. Records are stored in manual files and on magnetic tape, microforms, and discs. The system uses both standard and in-house software packages; the latter are particularly valuable for veterinary medical applications because they permit retrieval of data on individual laboratory tests or techniques.

Products and Services: Searches of the file for medical records that meet specified criteria may be performed on-line via interactive terminal as needed.

Availability of Products and Services: The data bank will accept written requests for services. Fees and user group restrictions have not yet been determined. Descriptive material is available in English.

LAB-US-101

UTAH STATE VETERINARY DIAGNOSTIC LABORATORY CASE FILE

Utah State University. Veterinary Diagnostic Laboratory
Logan UT 84319
U.S.A.

Contact: Stan Allen or Ross Smart

Telephone: (801) 750-1900 or 750-1883

Mission and Function: The Case File was established approximately five years ago to tabulate veterinary diagnostic laboratory cases.

Types of Information Available: The data bank derives epidemiologic, statistical, laboratory, and clinical data on animal health and disease entirely from records of cases submitted to the Laboratory for diagnostic support.

Data Elements and File Size: Data elements contained in each stored record include identifying information about the animal, the diagnosis, case number, and the tests that

were run. The *Standard Nomenclature of Veterinary Diseases and Operations*, 2nd ed., abridged (Washington, D.C., National Institutes of Health, U.S. Department of Health, Education, and Welfare, 1976) is used to select the diagnosis key words. Data may be retrieved by specific disease or geographic terms. Currently, there are 20,000 records in the data bank, with approximately 3,000 records added each year. The earliest case in the data bank is dated 1975. **Processing Mode:** The data bank uses batch processing on Utah State University's computer for data processing and retrieval; it uses punched cards for storage. Standard software is used.

Products and Services: Current and retrospective file searches and statistical analyses of the data are provided. Statistics are compiled in quarterly computer printouts and a published annual report, which are delivered to users by mail.

Publications: The *Annual Diagnostic Laboratory Report to the Agricultural Experiment Station*, by S. Allen and R. Smart, is published yearly. For information on availability, contact the Laboratory.

Availability of Products and Services: Requests for services should be directed to Dr. Allen or Dr. Smart. Retrieval service is available to any researcher; fees are charged for computer and personnel time.

Future Plans: Utah State University plans to cooperate with Texas A & M University on the development of a national diagnostic laboratory case file.

LAB-US-102

VERMONT STATE DIAGNOSTIC LAB

University of Vermont. Department of Animal Pathology
Burlington VT 05401
U.S.A.

Contact: W. D. Bolton

Telephone: (802) 656-2650

Mission and Function: The mission of the data bank is to store and retrieve records on animal health and disease in order to provide diagnostic and treatment recommendations regarding animal and poultry diseases to veterinarians. The data bank was established in 1945.

Types of Information Available: The data bank collects laboratory, clinical, economic and statistical data on animal and poultry health and disease from diagnoses determined by the Lab. These primary sources refer to diseases

occurring regionally as represented in specimens submitted by practicing veterinarians for diagnostic confirmation.

Data Elements and File Size: Each stored record contains a final draft of the diagnostic accession. Access to the data is through veterinarian's name, owner's name, and a disease index. Approximately 5,500 records are processed each year. The earliest record in the data bank is dated 1945; the most recent is current. The data bank is updated once a year.

Processing Mode: The data bank uses manual methods for processing and retrieval. Records are stored in manual files; records dated from 1945 through 1976 are stored on microfilm.

Products and Services: Services include searches of the current and retrospective files. Annual statistical summaries are produced.

Availability of Products and Services: Requests for reasonable amounts of service are accepted by mail. Services are generally available for a fee, subject to availability of staff.

Future Plans: The use of the University's computer system for quick retrieval is being considered.

LAB-US-103

WISCONSIN CENTRAL ANIMAL HEALTH LABORATORY (CAHL)

6101 Mineral Point Rd.
Madison WI 53705
U.S.A.

Contact: Joan M. Arnoldi, Director, Bureau of Technical Services

Telephone: (608) 266-2465

Parent Organization: Wisconsin, Department of Agriculture, Trade, and Consumer Protection
801 W. Badger Rd.
Madison WI 53708
U.S.A.

Mission and Function: The data bank was established in 1970 to collect information on animal health and disease in the state of Wisconsin by species, diagnosis, locality, and veterinarian.

Types of Information Available: The data bank contains case records for specimens submitted to the Laboratory for

diagnostic testing.

Data Elements and File Size: Stored records contain information on the origin of each accession—the veterinarian, owner, and species of animal—the number and types of tests performed, and the final diagnosis. Data are accessible chronologically by accession number, and by veterinarian and owner.

Processing Mode: The data bank uses computer batch processing for both input and retrieval on a Univac 9300 computer. Its software, developed in-house, is available for use by similar facilities. Records are stored on magnetic tape.

Products and Services: Both retrospective and current file searches may be provided. Information products consist of monthly computer printouts summarizing Laboratory activity.

Availability of Products and Services: Data are considered part of the public record and are available without restriction, within the constraints of staff time.

LAB-US-104

ZOOLOGICAL SOCIETY OF SAN DIEGO

Box 551
San Diego CA 92112
U.S.A.

Contact: G. E. Cosgrove, Pathology Department

Mission and Function: The Zoological Society of San Diego's data bank was established in 1968 to store and retrieve the zoo mortality information that has been gathered by postmortem examinations performed on all animals since July 1964.

Types of Information Available: The data bank collects statistical data derived from necropsy reports on zoo animal mortalities, specific diseases, or lesions in body systems. Data pertain only to animals in the San Diego Zoo.

Data Elements and File Size: Each record contains coded information about the species of animal, its age, the diagnostic procedures employed, the diagnostic category, the site of tissues taken for histopathologic studies, and the diagnosis. The system employs two indexing vocabularies. The pathology vocabulary, arranged by organ systems, was developed from past records of diagnoses made at the Zoo, consultation with other zoos, and from the *Standard Nomenclature of Veterinary Diseases and Operations*, 2nd ed.,

abridged (Washington, D.C., National Institutes of Health, U.S. Department of Health, Education, and Welfare, 1976). The species coding vocabulary was based on annual animal inventory reports of the San Diego Zoo, supplemented by those of other American zoos. Continuously subject to expansion as new species are added to the collection, the code permits retrieval by class, order, family, genus, or species. Any data element may be used as an access point. There were 14,869 records in the data bank, as of mid-1980. Approximately 1,200 records are added annually, at no set interval. The earliest record in the data bank is dated July 15, 1964.

Processing Mode: A manual optical coincidence punched card system is used to store and retrieve data. The system uses a semi-automatic card drilling device for input, Termat-

rex no. 301, and a calibrated answer reader for viewing output, Termatrex no. 52. Data are stored on Termatrex cards, in collated sets of 100. The Pathology Department uses the computer of another department of the Zoological Society of San Diego to obtain printouts.

Products and Services: The card sets are sorted to retrieve specific data on demand. Case numbers of the records retrieved can be used to refer to the complete necropsy report.

Availability of Products and Services: Information from the system is available to all. The data bank is described in a paper by Griner, L. A., and Hutton, N. E., entitled "A Pathology Data Retrieval System Adopted at a Zoological Garden," published in the *Journal of the American Veterinary Medical Association*, Vol. 153, no. 9, Oct. 15, 1968.

For other data banks containing laboratory and clinical data, see entries BIB-NL-004, BIB-UK-008, BIB-UK-009, BIB-UK-010, BIB-UK-012, BIB-UK-013, BIB-UK-014, BIB-UK-015, BIB-US-017, BIB-US-018, BIB-US-019, BIB-US-020, BIB-US-021, BIB-US-023, BIB-US-024, BIB-US-025, BIB-US-029, BIB-US-030, BIB-US-031, BIB-US-035, EPI-CO-039, EPI-FR-043, EPI-UK-051, EPI-US-055, EPI-US-057, EPI-US-059, EPI-US-060, EPI-US-061, EPI-US-062, EPI-US-063, EPI-US-065, EPI-US-066.

RESEARCH-IN-PROGRESS DATA BANKS

France

RES-FR-105

**INDEX VETERINAIRE FRANCAIS
(F.V.I.)**

M.I.L. France
23 rue Louis le Grand
75002 Paris
France

Contact: Alain Somia

Telephone: 010 331 742 9713
Telex: 240382 (2022)

Mission and Function: The Index Veterinaire Francais was established in 1978 as a commercial enterprise to measure purchases of ethical veterinary pharmaceuticals by veterinary surgeons in private practice in France.

Types of Information Available: Numerical data, derived from records of ethical veterinary pharmaceutical products purchased by veterinarians engaged in private practice, are collected entirely from primary sources in France.

Data Elements and File Size: Records contain numerical data coded by substance and biosystematic classification, and contract, grant, or project numbers. There were 180,000 items in the data bank as of 1980, dating from 1978 to the present. Approximately 180,000 records are processed annually, via semi-annual update reports.

Processing Mode: Computer batch processing and disc storage are employed by the system, which uses a software package developed specifically for it by a consultant.

Products and Services: Current and retrospective statistical analyses are provided. Computer printouts and a semi-annual printed report are available for distribution by mail. Special analyses can be performed on demand.

Availability of Products and Services: Contact M.I.L. for information on the availability of services. Fees are charged, and services are restricted to client subscribers.

United Kingdom

RES-UK-106

**INTERNATIONAL INDEX OF LABORATORY ANIMALS
(IILA)**

Medical Research Council (United Kingdom). Laboratory Animals Centre
Woodmansterne Rd.
Carshalton, Surrey
U.K.

Contact: M. F. W. Festing

Telephone: 01-643-8000
Cable: LABAN, Carshalton

Parent Organization: Medical Research Council (United Kingdom)
20 Park Crescent
London
U.K.

Mission and Function: The mission of the IILA data bank is to compile information on the location and the genetic and disease status of laboratory animal colonies. The data bank was established in 1969 and was computerized in 1980.

Types of Information Available: The data bank collects, via questionnaire, information from worldwide sources on

the location of laboratory animal colonies, and their genetic and disease status.

Data Elements and File Size: Data elements in each stored record consist of codes for institutions and species of animals. Data are accessible by institution and strain name. There are currently approximately 6,000 recent records in the data bank. Updating is presently undertaken once every three years.

Processing Mode: Manual and computer on-line methods are used for processing and retrieval. Records are stored on discs and in published form. The system uses standard software packages and a Hewlett Packard 3000 computer.

Products and Services: Searches of the current file are provided. Information products include computer printouts and a book. Output is produced at irregular intervals.

Publications: The *International Index*, 1980, by M. F. W. Festing, is available for approximately \$11.00 from the MRC Laboratory Animals Centre.

Availability of Products and Services: Data published in the *International Index* are available to all. Requests for other services should be submitted by letter. Special services at present are restricted to the staff of the Laboratory Animals Centre.

Future Plans: Plans are being made to update the data bank more frequently, to use sources of data other than the present questionnaire, and to transfer to a DEC 20/50 computer.

RES-UK-107

NATIONAL VETERINARY INDEX (N.V.I.)

Market Investigations
1 and 2 Berners St.
London W1P 3AG
U.K.

Contact: Clive West

Telephone: 01-637-1444
Telex: 25206

Mission and Function: The National Veterinary Index was established in 1963 as a commercial enterprise to measure purchases of ethical veterinary pharmaceuticals by veterinary surgeons in private practice in Great Britain.

Types of Information Available: Numerical data, derived from records of ethical veterinary pharmaceutical products purchased by veterinarians engaged in private practice, are

collected entirely from primary sources in Great Britain.
Data Elements and File Size: Records contain numerical data coded by substance and biosystematic classification, and contract, grant, or project numbers. There were 420,000 items in the data bank as of 1980, dating from 1963 to the present. Approximately 140,000 records are processed annually, via quarterly updates.

Processing Mode: Computer batch processing and disc storage are employed by the system, which uses a software package developed specifically for it by a consultant.

Products and Services: Current and retrospective statistical analyses are provided. Computer printouts and a quarterly printed report are available for distribution by mail. Special analyses can be performed on demand.

Availability of Products and Services: Contact Market Investigations (P and A), Ltd., for information on the availability of services. Fees are charged, and services are restricted to client subscribers.

RES-UK-108

NEDERLANDSE VETERINAIRE INDEX (D.V.I.)

Market Investigations
1 and 2 Berners St.
London W1P 3AG
U.K.

Contact: Clive West

Telephone: 01-637-1444
Telex: 25206

Mission and Function: The Nederlandse Veterinaire Index was established in 1972 as a commercial enterprise to measure purchases of ethical veterinary pharmaceuticals by veterinary surgeons in private practice in the Netherlands.

Types of Information Available: Numerical data, derived from records of ethical veterinary pharmaceutical products purchased by veterinarians engaged in private practice, are collected entirely from primary sources in the Netherlands.

Data Elements and File Size: Records contain numerical data coded by substance and biosystematic classification, and contract, grant, or project numbers. There were 225,000 items in the data bank as of 1980, dating from 1972 to the present. Approximately 75,000 records are processed annually, via semi-annual updates.

Processing Mode: Computer batch processing and disc storage are employed by the system, which uses a software

package developed specifically for it by a consultant.

Products and Services: Current and retrospective statistical analyses are provided. Computer printouts and a semi-annual printed report are available for distribution by mail. Special analyses can be performed on demand.

Availability of Products and Services: Contact Market Investigations (P and A), Ltd., for information on the availability of services. Fees are charged, and services are restricted to client subscribers.

United States

RES-US-109

CONFERENCE PAPERS INDEX (CPI)

Cambridge Scientific Abstracts
5161 River Rd.
Washington DC 20016
U.S.A.

Telephone: (800) 638-8076; or (301) 951-1400

Mission and Function: *Conference Papers Index* is designed to keep members of the scientific, technical, and medical professions informed about current research and development in their fields of interest and about relevant meetings worldwide. Titles of scientific and technical papers presented at over 800 national, international, and regional meetings are cited and indexed annually. The publication was formerly titled *Current Programs*.

Types of Information Available: Bibliographic data about research in progress are collected from worldwide conference reports of epidemiologic, laboratory, clinical, and statistical findings. Animal health and disease information is included in the life sciences, chemistry, engineering, and physical sciences coverage of the data bank. Approximately twenty-five percent of the papers cited in the data base are obtained directly from primary sources, while the remainder are derived from secondary sources. Only papers written in Roman character alphabets are included.

Data Elements and File Size: Each stored bibliographic record contains descriptive cataloging data, subject descriptors and codes, and sponsoring organizations. Records are stored in their original languages. On the average, five index postings, consisting of keywords derived from titles, are provided for each record. Records are accessible by author,

subject, and geographic area. Approximately 100,000 records are added each year, through monthly updates. Records date from 1973 to the present. As of mid-1980, there were approximately 750,000 records in the data base.

Processing Mode: CPI uses on-line computer processing, and magnetic tape and disc storage.

Products and Services: A monthly printed index journal is the primary product of the data base, but on-line access through several vendors is also available. This access supplies users with current and retrospective bibliographies and selective dissemination of information (SDI) service via interactive computer terminals. The data base is available for distribution on magnetic tape. Other services include published search aids and customer assistance for on-line searching.

Publications: A subscription to monthly issues of *Conference Papers Index* is available for \$375 per year; the monthly issues and cumulative index cost \$510 per year; the index alone costs \$225.

Availability of Products and Services: On-line access is available through DIALOG, ORBIT, BRS, and IRS. Fees vary according to the vendor used.

RES-US-110

CURRENT RESEARCH INFORMATION SYSTEM (CRIS)

United States. Department of Agriculture. Science and Education Administration. Technical Information Systems National Agricultural Library Bldg.
Beltsville MD 20705
U.S.A.

Contact: John R. Myers, Manager

Telephone: (301) 344-3846

Mission and Function: CRIS serves as the documentation and reporting system for research project information on publicly-supported agricultural and forestry research in the U.S.A. Established in 1969, the system compiles data on research conducted by the U.S. Department of Agriculture (USDA), the various State Agricultural Experiment Stations, schools of forestry, and other cooperating institutions. CRIS is linked to the Smithsonian Science Information Exchange data base, to which it supplies its technical file on a quarterly basis (see entry no. RES-US-113). The CRIS file is also available on-line through the DIALOG Information Retrieval Service.

Types of Information Available: Research-in-progress data are collected from Research Work Units, or narrative summaries of ongoing research projects in the U.S.A. These projects concern agriculture, forestry, and allied sciences, including food and nutrition, agricultural economics, and rural development. Among the Research Problem Areas of special interest to the USDA are: control of insects and external parasites affecting livestock, poultry and other animals; control of diseases of livestock, poultry and other animals; control of internal parasites of livestock, poultry and other animals; protection of livestock, poultry and other animals from toxic chemicals, poisonous plants and other hazards; protection of plants, animals and man from harmful effects of pollution; insuring food products free of toxic contaminants including residues from agricultural and other sources; protection of food and feed supplies from harmful microorganisms and naturally occurring toxins; and prevention of the transmission of animal diseases and parasites to man. All data are derived from these primary sources.

Data Elements and File Size: Stored work unit records contain subject descriptors; category classification codes; name of investigator(s); project summaries, including statements of objective and approach; contract, grant, or project numbers; sponsoring agencies or organizations; numerical data on funding and staffing; latest annual progress reports; and listing of the most recent publications produced by the research. Records are indexed with a partially controlled keyword vocabulary, derived from the title and text and from terms supplied by the investigator. Four classification codes and approximately 18 keywords are supplied per record. Virtually all data fields are searchable: free-text searching is available on-line. However, funding and manpower allocation data are not publicly available. Principal access points are subject, geographic term, and investigator. The system contains 25,000 current records. The file is updated three times a month, to add approximately 5,000 project summaries each year. Project summaries are held in the data base for two years after the projects are terminated, and then are purged from the system annually.

Processing Mode: Both batch and on-line computer modes are employed for processing and retrieval. Data are stored on magnetic tape and disc. The system uses IBM 370/168 and Datapoint 6600 hardware. CRIS's software was developed in-house.

Products and Services: Current file searches are provided daily, and on-line access is available on demand. Search results, in the form of computer printouts of project abstracts, are delivered to users by mail or by interactive computer terminal. Special searches are performed for institutions that participate in CRIS, including all land

grant universities conducting agricultural and veterinary research, all State Agricultural Experiment Stations, and all U.S. veterinary schools. The system is capable of aggregating funding and staffing data by research classification, although these products are restricted to USDA personnel.

Publications: The *Inventory of Agricultural Research*, a multi-volume collection of statistical tables published annually since 1966, reports scientist years and amount of funds devoted to designated Research Problem Areas and commodities by each performing organization; scientist years and funds for State Agricultural Experiment Stations, forestry schools, other cooperating institutions, and USDA agencies; funding data for USDA research by source of funds; funding data for state stations and other non-federal institutions by source of funds; and scientist years by Research Program Group and Research Program, which consist of unique combinations determined by type of research, commodity, and Research Problem Area classification. Current issues may be purchased from the National Technical Information Service (NTIS), Springfield, VA 22161, U.S.A.; recent issues are available for sale in microform from Congressional Information Service, Inc., 4520 East-West Hwy., Washington, DC 20014, U.S.A. CRIS also publishes the *Manual of Classification of Agricultural and Forestry Research* (Revision III, 1978), which describes the classifications used in CRIS by activity, by commodity, resource or technology, by field of science, and by Research Problem Area; and the *Keyword Bank in CRIS* (most recent edition, 1980), which lists the keywords that have been used to index research projects in CRIS, and which therefore serves as a guide to the subject content and scope of the CRIS file. These two publications are available for sale from NTIS. Inquire for prices of all publications.

Availability of Products and Services: CRIS provides services at no charge to USDA personnel and to state participating institutions. Requests for such services should be submitted in writing, with search topics described in narrative form. Public on-line access is available through DIA-LOG, for an hourly fee. Publications may be purchased by anyone. Descriptive materials are available in English.

RES-US-111

INTERNATIONAL CANCER RESEARCH DATA BANK
PROGRAM
(ICRDB)

National Cancer Institute
Bethesda MD 20205
U.S.A.

Contact: John H. Schneider

Telephone: (301) 496-6271

Mission and Function: ICRDB was established in 1964. Its mission is to collect and disseminate all information related to cancer, including information concerning cancer in animals, agents that cause or are used to treat cancer, and cancer biology. ICRDB maintains three computerized data bases, available as subfiles of the MEDLARS (Medical Literature Analysis and Retrieval System) data base of the National Library of Medicine.

Types of Information Available: Bibliographic data and descriptions of current research, including active clinical protocols, are collected worldwide, in all languages, on all aspects of cancer.

Data Elements and File Size: In the records stored in each of the three data bases, the following data elements may be included, as appropriate: descriptive cataloging data; subject descriptors; abstracts; project summaries; contract, grant, or project numbers; and sponsoring agencies or organizations. Records are stored in English translation. Although on-line access to the data bases permits free-text searching, index terms are also assigned to each record, from the *Medical Subject Headings* (MeSH) of the National Library of Medicine. Principal access points to the data are subject and author or investigator. There were 200,000 records in the data bank as of 1980, with 60,000 records processed annually. The earliest record in the data bank is dated 1963; the most recent is current. The data bank is updated monthly.

Processing Mode: Both batch and on-line computer techniques are used for data processing and retrieval. Information is stored on magnetic tape. ICRDB uses software developed in-house.

Products and Services: The ICRDB's data bases, with the collective name of CANCERLINE, consist of CANCERLIT, containing abstracts of published literature; CANCERPROJ, containing descriptions of current ongoing cancer projects around the world; and CLINPROT, containing summaries of clinical cancer therapy protocols. Through the CANCERLINE data bases, current and retrospective bibliographies, on-line access, and selective dissemination of information services are made available. Information is provided to users by mail, interactive computer terminals, and teletypewriter printouts. Monthly and annual output services are produced. In addition to the data base and

publication services, ICRDB supports three Cancer Information Dissemination and Analysis Centers (for diagnosis and therapy, carcinogenesis, and cancer biology); maintains the Current Cancer Research Projects Analysis Center; and promotes several international cancer research activities. **Publications:** ICRDB publications include *Cancergrams*, published monthly to provide current awareness information on major areas of cancer research; *Special Listings*, consisting of 55 annual compilations describing ongoing projects in various cancer research areas; *Oncology Overviews*, which are specialized bibliographies containing abstracts of recent articles on topics of timely interest; the *Compilation of Clinical Protocol Summaries*, issued irregularly; and the *Directory of Cancer Research Information Sources*, issued irregularly. These publications are available from the National Technical Information Service, Springfield, VA 22161, U.S.A. Prices vary. Information on other publications issued in collaboration with various international bodies may be obtained from ICRDB.

Availability of Products and Services: Services are available to any person involved in cancer research in any country. When the CANCERLINE data bases are searched on-line by computer terminals, through the MEDLARS system, a fee of \$22 per hour (prime time) or \$15 per hour (non-prime time) is charged. An additional fee of \$0.15 per page is charged for off-line prints. Descriptive material is available in English.

RES-US-112

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

50 Wolf Rd.
Albany NY 12233
U.S.A.

Contact: Ron Sloan

Telephone: (518) 457-6178

Mission and Function: The Division of Fish and Wildlife records data on concentrations of contaminants in various life forms, particularly fish, in the state of New York. Data are reported in preliminary form in order to communicate the most up-to-date knowledge on environmental contaminant concentrations to the staff of the Department and the public, to provide target dates for release of information on contaminants, and to describe actions being taken concerning resource utilization. These analyses provide infor-

mation on the dynamics of toxic substances in natural systems and contribute to effective management decisions for New York's fish and wildlife resources. Statewide toxic substance monitoring data are submitted to the U.S. Environmental Protection Agency.

Types of Information Available: Research-in-progress data are collected from laboratory findings of the Division of Fish and Wildlife and other cooperating laboratories. Contaminant data are analyzed by species and collection site. Principal contaminants are found to be organochlorine and heavy metal residues. Analyzed specimens are collected by field units of the Bureau of Fisheries and the Bureau of Wildlife. Data collected from these primary sources pertain exclusively to the state of New York.

Data Elements and File Size: Data on fish are indexed species-by-species under family name, common name, and phyletic arrangement. These index terms are derived from the American Fisheries Society's *List of Common and Scientific Names of Fishes from the United States and Canada*.

Processing Mode: Data are processed, stored, and retrieved manually.

Products and Services: Data are reported in the *Quarterly Report on Toxic Substances Impacting on Fish and Wildlife*, and are compiled annually. These reports, delivered to users by mail, contain interpreted data tabulations, statements of actions to be taken as a result of these interpretations, pertinent facts not previously reported, and a brief description of work planned during the next quarter in the field and in the Division's analytical laboratories.

Availability of Products and Services: Copies of the reports may be obtained by writing to the Bureau of Environmental Protection, Division of Fish and Wildlife, Department of Environmental Conservation, Albany NY 12233, U.S.A.

RES-US-113

SMITHSONIAN SCIENCE INFORMATION EXCHANGE (SSIE)

National Technical Information Service
5285 Port Royal Rd.
Springfield VA 22161
U.S.A.

Telephone: (703) 487-4730

Mission and Function: Established in 1949, the Smithsonian Science Information Exchange data base collects

and disseminates current information about on-going research projects, both basic and applied, in all fields of the physical and life sciences. By supplying information about research in progress, from inception until publication, the SSIE data base assists scientists in the planning and performance of research activities. Developed by the Smithsonian Science Information Exchange, Inc., a private not-for-profit organization established by the Smithsonian Institution, the SSIE data base was placed under the jurisdiction of the National Technical Information Service (NTIS) in 1981.

Types of Information Available: Descriptions of research in progress are collected directly from public and private funding sources, research institutions and organizations, and individuals. Although some foreign research projects are included, most projects are being conducted in the U.S.; 80 percent of the descriptions are provided by U.S. government agencies. The data base includes descriptions of projects in agriculture, behavioral sciences, biological sciences, chemistry, earth and environmental sciences, engineering, mathematics, medicine, physics, and social sciences. Animal health and disease data may be retrieved by disease, causal organism, or specific body systems affected.

Data Elements and File Size: Project descriptions are reported on Notice of Research Project (NRP) forms. Data elements include the name of the supporting organization; project title; grant, contract, or administrative control number of the project; name and department or specialty of the principal investigator and coinvestigators; time period covered by the NRP; level of funding; and a 200-word description of the work to be performed. Project descriptions are classified and indexed by keyword or concept. Data are accessible by subject, performing organization, investigator, or administrative control number. There are approximately 200,000 unique current records in the data base; most describe projects conducted during the current and past two fiscal years. Approximately 12,000 projects that involve vertebrate pathology or disorders are included in the data base. If this topic is expanded to include basic physiology, anatomy, or use of animals as models for humans, there are 32,000 projects dealing with mammals other than man; 3,200 dealing with birds; 820 with amphibians; 400 with reptiles; 2,300 with fish; 1,300 with molluscs; 4,700 with insects; and 850 with crustaceans. Approximately 4,700 projects are concerned with animal viruses. Each year, a total of approximately 125,000 records on all subjects, either new entries or updates of continuing projects, are processed. Updated entries are re-indexed as necessary to reflect shifts in emphasis, scope, and methodology. Descriptions of completed projects are retired to a microfilm historical file where they are retained for five fiscal years.

Processing Mode: The SSIE data base is maintained on the

NTIS computer. Data are submitted by government agencies on magnetic tape.

Products and Services: Magnetic tapes of the data base may be purchased. Direct on-line access is available through vendors.

Availability of Products and Services: The SSIE data base may be searched on-line via interactive terminals, through vendors: DIALOG Information Service; Bibliographic Retrieval Service, Inc. (BRS); and the System Development Corporation's ORBIT Search Service.

For other data banks containing research-in-progress data, see entries BIB-PT-007, BIB-UK-014, BIB-US-031, BIB-US-034.

SUBJECT INDEX

This index contains subject descriptors and geographic terms that have been assigned to data bank entries. Terms are arranged in letter-by-letter order. Accession numbers indicate the section of the *Directory* in which the entry appears, the country of origin of the data bank, and the sequential number of the entry in the *Directory*.

section
 country
 entry number
 Swine erysipelas, EPI-US-054

Abattoirs, EPI-AU-037, EPI-US-054

Abortion, LAB-NZ-073

Abstracting journals, BIB-NL-004, BIB-UK-008, BIB-UK-009, BIB-UK-011, BIB-UK-012, BIB-UK-013, BIB-UK-015, BIB-US-019, BIB-US-020, BIB-US-027, BIB-US-035, EPI-UK-049

Acarina, LAB-US-085

Actinobacillus, EPI-US-054

Actinomyces, EPI-US-054

African swine fever virus, BIB-US-022

Aging, BIB-US-019, BIB-US-020

Agricultural economics, BIB-US-016

Agriculture, BIB-IT-002, BIB-US-016, BIB-US-027, BIB-US-032, RES-US-110, RES-US-113

Air sac inflammation, EPI-US-054

Amdahl computers, EPI-US-065, LAB-US-100

Amphibia, RES-US-113

Anesthetics, LAB-US-099

Animal behavior, BIB-UK-011, BIB-US-026, BIB-US-028, BIB-US-029

Animal breeding, EPI-FR-043, EPI-UK-050, LAB-NO-074, LAB-UK-075

Animal diseases, BIB-IT-003, BIB-UK-010, BIB-UK-015, BIB-US-016, BIB-US-029, BIB-YU-036, EPI-CO-039, EPI-EC-041, EPI-KR-047, EPI-UK-049, EPI-US-053, EPI-US-066, LAB-AU-067, LAB-AU-070, LAB-US-079, LAB-US-088, LAB-US-090, LAB-US-093, LAB-US-094, LAB-US-102, LAB-US-104, RES-US-113

Animal experiments, BIB-US-029, LAB-UK-075

Animal hospitals, LAB-US-076, LAB-US-077, LAB-US-099, LAB-US-100

Animal housing, EPI-FR-043

Animal models of human behavior, RES-US-113

Animal models of human disease, LAB-US-086

Animal production, BIB-US-019, EPI-KR-047

Animal products, BIB-PT-007, BIB-US-016, EPI-US-056, LAB-US-088

Antibodies, EPI-US-063

Aquarium fish, BIB-US-025

Arctic, BIB-US-026

Arkansas, EPI-US-053

Arthritis, EPI-US-054

Arthropods, BIB-UK-013, BIB-US-021

Artificial insemination, EPI-FR-043

Atmospheric sciences, BIB-US-027	CDC CYBER computers, EPI-US-055, LAB-AU-068, LAB-US-084, LAB-US-086
Aujeszky's virus, BIB-US-022	Chemical factors, BIB-US-017, BIB-US-024, LAB-US-078
Australia, EPI-AU-037	Chemicals, EPI-US-063
BASIS software, LAB-US-086	Chemistry, BIB-US-016, BIB-US-020, BIB-US-027, BIB-US-032, RES-US-109, RES-US-113
Bees, BIB-YU-036, EPI-IT-046, EPI-UK-049	Chemoprophylaxis, BIB-US-018
Behavioral sciences, BIB-US-027, RES-US-113	Chlordane, EPI-US-063
BHC, EPI-US-063	Chlorinated hydrocarbons, EPI-US-063
Biochemistry, BIB-UK-011, BIB-US-020	Climatic factors, EPI-FR-043
Biology, BIB-NL-004, BIB-US-019, BIB-US-027, BIB-US-032, RES-US-113	Clinical examination, LAB-US-076, LAB-US-080, LAB-US-099, LAB-US-100
Birds, EPI-IT-046, EPI-UK-051, LAB-US-084, RES-US-113	COBOL programming language, LAB-US-088
Birds of prey, BIB-US-028	Coccidiosis, EPI-US-054
Bluetongue virus, BIB-US-022	Colombia, EPI-CO-039
Botany, BIB-US-016	Computer Automation minicomputers, EPI-UK-050
Brucellosis, BIB-US-016, BIB-US-022, EPI-AU-037, EPI-DK-040, EPI-EC-041, EPI-US-054, EPI-US-061, EPI-US-062, LAB-US-085	Conferences, RES-US-109
Bull, LAB-NO-074	Contagious equine metritis, BIB-US-022
Burroughs computers, LAB-AU-069, LAB-US-088	Cow, EPI-UK-050, LAB-AU-068, LAB-NO-074
	Coyote, BIB-US-028
	Crustacea, RES-US-113
Calcification, BIB-UK-011	CYBER terminals, EPI-GE-045
California, LAB-US-104	Cysticercosis, EPI-US-054
Canada, LAB-US-076, LAB-US-080, LAB-US-086, LAB-US-091	
Carcass condemnation, EPI-US-054, EPI-US-064	Data collection, EPI-CO-039, LAB-US-076
Carcinogens, RES-US-111	Data General minicomputers, LAB-AU-070
Carcinoma, BIB-FR-001, EPI-US-054, RES-US-111	Datapoint computers, EPI-US-057, EPI-US-061, EPI-US-062, RES-US-110
Caribbean, EPI-BR-038	DDT, EPI-US-063
Cat diseases, EPI-UK-049	DEC minicomputers, RES-UK-106
Cattle, EPI-FR-043, EPI-UK-051, EPI-UK-052, EPI-US-054, LAB-NZ-073, LAB-UK-075, LAB-US-095	Denmark, EPI-DK-040
Cattle diseases, BIB-PT-007, EPI-DK-040, EPI-UK-049, EPI-UK-050, LAB-NO-074, LAB-UK-075	Destruction of animals, LAB-UK-075
CDC computers, EPI-US-061, LAB-AU-069, LAB-US-077	Diagnosis, EPI-UK-051, LAB-UK-075, LAB-US-090

- Digital PDP computers, BIB-NL-004, EPI-BR-038, LAB-FR-071, LAB-US-091
- Disease prevalence, EPI-CO-039, EPI-IT-046, EPI-UK-049, EPI-UK-051
- Disease prevention, BIB-US-025, LAB-US-081, LAB-US-092
- Disease statistics, EPI-EC-041, EPI-IT-046, EPI-US-065
- Disease surveillance, EPI-AU-037, EPI-BR-038, EPI-FR-043, EPI-IT-046, EPI-SZ-048, EPI-UK-049, EPI-US-055, EPI-US-060, LAB-AU-069, LAB-NZ-073
- Disease transmission, BIB-UK-013, BIB-US-026
- Diseases hazardous to man, EPI-US-053
- DNA, BIB-US-023
- Dog diseases, EPI-UK-049
- Drugs, BIB-US-018, BIB-US-033, EPI-US-063
- Eagle, EPI-US-058
- Earth sciences, BIB-US-027, RES-US-113
- East Africa, LAB-KE-072
- East Coast fever, BIB-US-022
- Ecology, BIB-UK-011, BIB-US-028
- Economics, BIB-IT-003, BIB-PT-007, BIB-UK-008, BIB-UK-010, EPI-CO-039, EPI-UK-050, EPI-US-056
- Ectoparasitoses, LAB-US-085
- Ecuador, EPI-EC-041
- Edge-notched card systems, BIB-US-029
- Electrophoresis, LAB-US-084
- Engineering, BIB-US-027, BIB-US-032, RES-US-109, RES-US-113
- England, EPI-UK-050, EPI-UK-051, EPI-UK-052, LAB-UK-075
- Entomology, BIB-UK-011, BIB-UK-013, BIB-US-016, BIB-US-021, BIB-US-022
- Environment, BIB-US-024, BIB-US-032, EPI-FR-043, LAB-US-080, RES-US-113
- Environmental pollution, BIB-NL-004, BIB-US-016, BIB-US-017, BIB-US-023, LAB-US-078
- Enzootic leukosis, EPI-DK-040
- Ephemeral fever, BIB-US-022
- Epidemiological surveys, EPI-AU-037, EPI-IT-046, EPI-US-065
- Equine encephalomyelitis virus, BIB-US-022
- Equine infectious anemia virus, EPI-US-057, EPI-US-062, LAB-US-082
- Europe, EPI-UK-049
- Farm, EPI-FR-043
- Feed, EPI-FR-043, EPI-GE-044
- Feed formulation, LAB-US-092
- Feed of animal origin, EPI-GE-044
- Fertility, EPI-UK-050
- Fish, RES-US-112, RES-US-113
- Fish diseases, BIB-US-016, BIB-US-018, BIB-US-025, BIB-YU-036, EPI-IT-046, EPI-UK-049, LAB-US-080, LAB-US-081, LAB-US-089, LAB-US-092
- Fish farming, BIB-IT-002, BIB-YU-036, LAB-US-089, LAB-US-092
- Florida, LAB-US-082, LAB-US-100
- Food hygiene, BIB-YU-036, EPI-GE-044, EPI-UK-052, EPI-US-054, RES-US-110
- Food industry, EPI-US-056
- Food inspection, EPI-US-056
- Foot and mouth disease, BIB-US-022, EPI-BR-038, EPI-EC-041, EPI-IT-046
- Forensic medicine, BIB-NL-004
- Forestry, BIB-IT-002, BIB-US-016, RES-US-110
- Four Phase minicomputers, BIB-US-016
- Four Phase terminals, EPI-US-054
- Fowl, EPI-UK-052, EPI-US-054
- Fowl plague virus, BIB-US-022
- Fox, BIB-US-028
- France, EPI-FR-042, EPI-FR-043, RES-FR-105
- Game animals, BIB-YU-036

- Gene mutation, BIB-US-023
- Genetics, BIB-UK-011, BIB-US-017, BIB-US-023, RES-UK-106
- GENSTAT software, EPI-FR-043
- Geographic distribution, BIB-US-019
- Georgia, LAB-US-083
- Germany FR, EPI-GE-044
- Goat, EPI-UK-049, EPI-UK-052, EPI-US-054
- Goose, EPI-UK-052
- Growth, LAB-US-086
- Guinea-fowl, EPI-UK-052
- Hawaii, EPI-US-058
- Health, BIB-NL-004, LAB-US-096
- Heartwater disease, BIB-US-022
- Helminthology, BIB-UK-009
- Helminths, BIB-UK-009
- Hematology, LAB-US-084, LAB-US-086
- Hewlett Packard computers, EPI-US-063, RES-UK-106
- Hog cholera, BIB-US-022
- Hormones, EPI-US-063
- Horse, EPI-UK-049, EPI-US-054, EPI-US-057
- Host-parasite relationship, BIB-UK-009, BIB-UK-012
- Husbandry methods, BIB-US-016, BIB-YU-036, EPI-UK-050, LAB-AU-068, LAB-UK-075, LAB-US-086
- Hygiene, LAB-US-095
- IBM computers, BIB-IT-002, BIB-UK-011, BIB-UK-014, BIB-US-016, BIB-US-019, BIB-US-020, BIB-US-022, BIB-US-026, BIB-US-028, BIB-US-030, BIB-US-032, BIB-US-034, EPI-US-054, EPI-US-059, EPI-US-066, LAB-NO-074, LAB-US-076, RES-US-110
- ICL computers, EPI-UK-051, EPI-UK-052, LAB-NZ-073, LAB-UK-075
- Immunology, BIB-UK-011
- Indexing journals, BIB-IT-002, BIB-UK-010, BIB-US-016, BIB-US-029, BIB-US-032, RES-US-109
- Insects, BIB-UK-013, RES-US-113
- Iowa, LAB-US-085
- IRIS computers, EPI-FR-043
- Laboratory animals, BIB-US-017, BIB-US-019, LAB-US-086, LAB-US-096, RES-UK-106
- Laboratory diagnosis, BIB-US-031, EPI-AU-037, EPI-UK-051, EPI-US-055, EPI-US-057, EPI-US-058, LAB-AU-067, LAB-AU-069, LAB-AU-070, LAB-FR-071, LAB-KE-072, LAB-NZ-073, LAB-US-077, LAB-US-082, LAB-US-083, LAB-US-085, LAB-US-087, LAB-US-090, LAB-US-091, LAB-US-093, LAB-US-094, LAB-US-098, LAB-US-100, LAB-US-101, LAB-US-102, LAB-US-103
- Lactation, BIB-UK-008, LAB-AU-068
- Large animal practice, BIB-US-035, LAB-US-087
- Lesions, LAB-US-104
- Life sciences, RES-US-109
- Lindane, EPI-US-063
- Liver diseases, EPI-US-054
- Lymphadenitis, EPI-US-054
- Mammals, BIB-US-020, EPI-IT-046, LAB-US-084, RES-US-113
- MANIPULATOR programming language, LAB-US-077
- Maryland, LAB-US-077
- Massachusetts, LAB-US-087
- Mastitis, BIB-UK-008, EPI-US-054
- Mathematics, BIB-US-027, RES-US-113
- Meat hygiene, EPI-US-054
- Meat inspection, EPI-US-054, EPI-US-063, EPI-US-064, LAB-US-088
- Medicine, BIB-NL-004, BIB-US-019, BIB-US-027, BIB-US-032, RES-US-109, RES-US-113
- Memorex terminals, LAB-AU-068
- Metals, EPI-US-063, RES-US-112
- Meteorology, LAB-UK-075

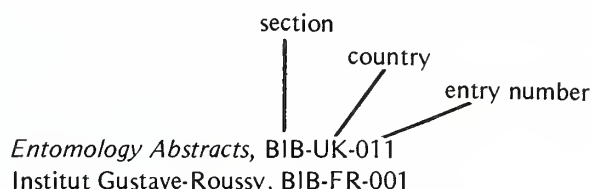
- Metritis, EPI-US-054
- Michigan, BIB-US-031, EPI-US-055, LAB-US-088
- Microbiology, BIB-UK-011
- Milk, BIB-UK-008
- Milk production, BIB-UK-008, EPI-FR-043, EPI-UK-050, LAB-AU-068, LAB-NO-074, LAB-UK-075
- Milk products, BIB-PT-007, BIB-UK-008, LAB-US-088
- Milk ring test, EPI-AU-037
- Minnesota, EPI-US-056
- Mississippi, EPI-US-057, LAB-US-089
- Mollusca, RES-US-113
- Montana, LAB-US-090
- Morbidity, EPI-US-053, RES-UK-106
- Mule, EPI-US-054
- Mutagens, BIB-US-017, BIB-US-023
- Myositis, EPI-US-054
- NCR computer terminals, LAB-US-100
- Nebraska, EPI-US-059
- Neoplasms, EPI-US-054, RES-US-111
- Nephritis, EPI-US-054
- Netherlands, RES-UK-108
- Nevada, EPI-US-060
- Newcastle disease, BIB-US-022
- New Jersey, LAB-US-079, LAB-US-098
- New Mexico, EPI-US-061
- New York, LAB-US-092, LAB-US-093, RES-US-112
- New Zealand, LAB-NZ-073
- North America, BIB-US-026, EPI-US-058
- Norway, LAB-NO-074
- Notification of diseases, EPI-IT-046, EPI-UK-052
- Nova minicomputers, EPI-AU-037
- Nutrition, BIB-IT-002, BIB-US-020, RES-US-110
- Nutritional factors, LAB-US-080
- Oklahoma, EPI-US-062
- Olivetti minicomputers, BIB-IT-003
- Optical coincidence card systems, EPI-US-058, LAB-US-080, LAB-US-104
- Oregon, LAB-US-094, LAB-US-096
- Organic chlorine compounds, RES-US-112
- Parasites, BIB-UK-009, BIB-UK-012, BIB-US-019, BIB-US-026
- Paratuberculosis, EPI-DK-040
- Partridge, EPI-UK-052
- Parturition, LAB-UK-075
- Pathology, BIB-US-031, LAB-US-077, LAB-US-081, LAB-US-086, LAB-US-097, RES-US-113
- PBB, LAB-US-088
- Pennsylvania, LAB-US-081, LAB-US-095
- Pericarditis, EPI-US-054
- Peritonitis, EPI-US-054
- Peru, BIB-PE-005
- Pesticides, BIB-US-016, BIB-US-021, EPI-US-063, LAB-US-088
- Pest management, BIB-US-019, BIB-US-021
- Pets, BIB-US-035
- Pharmaceutics, BIB-NL-004, RES-FR-105, RES-UK-107, RES-UK-108
- Pharmacodynamics, BIB-US-020
- Pharmacology, BIB-US-018, BIB-US-025
- Pheasant, EPI-UK-052
- Philips computer equipment, BIB-FR-001
- Physical factors, BIB-US-024
- Physical sciences, BIB-US-027, RES-US-109, RES-US-113
- Physico-chemical techniques, LAB-US-085

Pneumonia, EPI-US-054	RPG programming language, LAB-US-088
Poisoning, LAB-FR-071, LAB-US-078	Ruminantia, EPI-FR-043
Population statistics, BIB-US-026	
Portugal, BIB-PT-006, BIB-PT-007	Salmonella, EPI-GE-044, EPI-UK-052, LAB-AU-069
Post mortem examination, EPI-US-060	Salmonellosis, EPI-DK-040, EPI-GE-044, EPI-UK-052
Post mortem findings, LAB-US-077, LAB-US-079, LAB-US-090, LAB-US-093, LAB-US-104	San Miguel sea lion virus, BIB-US-022
Poultry, EPI-US-063	Scotland, EPI-UK-051, EPI-UK-052
Poultry diseases, EPI-UK-049, EPI-US-054, LAB-US-098, LAB-US-102	Septicemia, EPI-US-054
Practitioners, RES-FR-105, RES-UK-107, RES-UK-108	Serological techniques, EPI-AU-037, LAB-US-085
Predators, BIB-US-028	Sheep, EPI-DK-040, EPI-UK-049, EPI-UK-051, EPI-UK-052, EPI-US-054
Primates, BIB-US-029, LAB-US-096	Siemens computers, EPI-GE-044, EPI-GE-045
PRIME 550 computer, LAB-US-096	Social sciences, BIB-US-027, RES-US-113
Protozoa, BIB-UK-012	SOCRATE software, EPI-FR-043
Protozoology, BIB-UK-012	Soil, BIB-US-016, EPI-FR-043
Public health, BIB-YU-036, EPI-US-053, EPI-US-066	South America, EPI-BR-038
	South Australia, LAB-AU-069
Quail, EPI-UK-052	South East Asia, LAB-AU-069
Quality control, EPI-UK-050, EPI-US-066, LAB-US-095	Specimen handling, EPI-UK-051, LAB-US-097
Quarantine, EPI-KR-047	Sperry Univac computers, BIB-FR-001, LAB-AU-067, LAB-US-082, LAB-US-095, LAB-US-103
Queensland, LAB-AU-067	SPF husbandry, EPI-US-059
	Statistics, BIB-PT-006
Rabbit, EPI-UK-052, EPI-US-054	Steroids, EPI-US-063
Rabies, EPI-EC-041, EPI-FR-042, EPI-SZ-048, EPI-US-060	Surgical operations, LAB-US-099
Regulations enforcement, EPI-UK-052, EPI-US-054, LAB-US-095	Swine, EPI-UK-050, EPI-UK-051, EPI-UK-052, EPI-US-054, EPI-US-059
Reindeer, EPI-US-054	Swine diseases, EPI-UK-049, EPI-US-054, EPI-US-059, EPI-US-064
Reptilia, RES-US-113	Swine erysipelas, EPI-US-054
Research, BIB-US-029, LAB-US-077, LAB-US-096, RES-US-110, RES-US-111	Swine fever, BIB-US-022
Residues, EPI-US-063	Swine vesicular disease virus, BIB-US-022
Rift Valley fever, BIB-US-022	Switzerland, EPI-SZ-048
Rinderpest virus, BIB-US-022, LAB-KE-072	Synovitis, EPI-US-054

- Teleray computer terminals, LAB-US-100
- Tennessee, LAB-US-099
- Teratogens, BIB-US-017, BIB-US-024
- Texas, EPI-US-065
- Therapeutic substances, BIB-UK-014, RES-FR-105, RES-UK-107, RES-UK-108
- Therapy, EPI-FR-043, LAB-UK-075, LAB-US-102
- Toxaphene, EPI-US-063
- Toxicology, BIB-UK-011, BIB-US-017, BIB-US-020, BIB-US-021, BIB-US-023, BIB-US-030, BIB-US-033, BIB-US-034, LAB-FR-071, LAB-US-078
- Toxic substances, BIB-US-024, BIB-US-030, LAB-US-078, LAB-US-088, RES-US-112
- Trypanosoma, BIB-US-022
- Tuberculosis, EPI-DK-040, EPI-US-054, EPI-US-064
- Turkeys, EPI-UK-052, EPI-US-054
- United Kingdom, EPI-UK-051, EPI-UK-052, RES-UK-107
- Uremia, EPI-US-054
- USA, BIB-US-022, BIB-US-028, EPI-US-054, EPI-US-064, LAB-US-076, LAB-US-080, LAB-US-084, LAB-US-086, LAB-US-091, RES-US-110
- Utah, LAB-US-101
- Utilization of animals, LAB-US-095
- UTS computer terminals, LAB-US-082
- Vaccination, EPI-AU-037, LAB-UK-075
- Venezuelan equine encephalomyelitis, BIB-US-022
- Venom, BIB-US-021
- Vermont, EPI-US-066, LAB-US-102
- Vertebrates, RES-US-113
- Vesicular exanthema virus, BIB-US-022, EPI-BR-038, EPI-IT-046
- Vesicular stomatitis virus, BIB-US-022, EPI-BR-038, EPI-IT-046
- Veterinarians, LAB-US-099, RES-FR-105, RES-UK-107, RES-UK-108
- Veterinary education, BIB-PT-006, EPI-US-055, LAB-US-076
- Veterinary medicine, BIB-IT-002, BIB-PT-006, BIB-UK-010, BIB-UK-014, BIB-UK-015, BIB-US-016, BIB-US-019, BIB-US-035, EPI-KR-047, LAB-US-076
- Veterinary practice, BIB-PT-006, BIB-UK-014, BIB-UK-015, BIB-US-035, LAB-FR-071
- Veterinary schools, BIB-YU-036, LAB-US-077, LAB-US-100, RES-US-110
- Veterinary services, EPI-AU-037, EPI-US-066, LAB-US-095
- Victoria, LAB-AU-068
- Vicunas, BIB-PE-005
- Viral diseases, BIB-US-022, EPI-GE-045
- Virology, BIB-UK-011, EPI-GE-045
- Viruses, EPI-GE-045, RES-US-113
- VISI records system, EPI-US-057
- Visna-maedi virus, BIB-US-022, EPI-DK-040
- Wales, EPI-UK-051, EPI-UK-052
- Washington, BIB-US-029
- Water pollution, BIB-US-025, LAB-US-088, RES-US-112
- Western Australia, LAB-AU-070
- Wild animals, BIB-US-026, BIB-US-031, BIB-YU-036, EPI-US-058, LAB-US-079
- Wisconsin, LAB-US-103
- Wolf, BIB-US-028
- Zoo animals, LAB-US-084, LAB-US-093, LAB-US-104
- Zoonoses, BIB-IT-003, EPI-UK-052, EPI-US-062

ORGANIZATION AND TITLE INDEX

This index contains titles of publications associated with the data banks, and the names of agencies and organizations that operate, administer, or sponsor them. Titles and organization names are arranged in letter-by-letter order. Accession numbers indicate the section of the *Directory* in which the entry appears, the country of origin of the data bank, and the sequential number of the entry in the *Directory*.



- | | |
|---|---|
| <i>Abstracts of Entomology</i> , BIB-US-019 | American Veterinary Publications, BIB-US-035 |
| <i>Abstracts of Mycology</i> , BIB-US-019 | ANADIS, EPI-AU-037 |
| <i>Abstracts on Health Effects of Environmental Pollutants</i> , BIB-US-019 | <i>Animal Behaviour Abstracts</i> , BIB-UK-011 |
| AGECON, BIB-US-016 | <i>Animal Disease Occurrence</i> , EPI-UK-049 |
| AGRICOLA, BIB-US-016, BIB-US-022 | Animal Disease Records System, LAB-AU-067 |
| Agricultural On-Line Access, BIB-US-016 | <i>Animal Disease Reports</i> , EPI-UK-051, EPI-UK-052 |
| Agricultural Research Council (United Kingdom), LAB-UK-075 | <i>Animal Disease Thesaurus</i> , BIB-US-016, BIB-US-022 |
| <i>Agrindex</i> , BIB-IT-002 | <i>Animal Health Yearbook</i> , EPI-IT-046, EPI-UK-049 |
| AGRIS, BIB-IT-002, BIB-PT-006, BIB-UK-013 | Animal Information File, BIB-US-017 |
| <i>AHDL Abstracts</i> , EPI-US-055 | Animal Pathology Index, LAB-US-077 |
| AIF, BIB-US-017 | <i>Animal Salmonellosis</i> , EPI-UK-052 |
| American Agricultural Economics Documentation Center, BIB-US-016 | Animal Toxicology Hotline, LAB-US-078 |
| American Association of Veterinary Laboratory Diagnosticians, EPI-US-065 | Aquascience Research Group, BIB-US-018 |
| American Fisheries Society, RES-US-112 | Aquascience Research Group: Drugs and Chemicals Used in Fish Medicine, BIB-US-018 |
| American Registry of Pathology, LAB-US-097 | ARG — FISHDRUG, BIB-US-018 |
| American Veterinary Medical Association, LAB-US-097 | <i>Arkansas Animal Morbidity Report</i> , EPI-US-053 |
| American Veterinary Medical Data Program, LAB-US-076, LAB-US-099 | Arkansas. Department of Health, EPI-US-053 |
| | Arkansas. Epizootic Disease Program, EPI-US-053 |

- ARPDS, LAB-AU-067
- Arsberetning fra Veterinaerdirektoratet*, EPI-DK-040
- Arsmelding fra Helsekortutvalget*, LAB-NO-074
- Association of Veterinary Medical Data Program Participants, LAB-US-076, LAB-US-099
- Auburn University, LAB-US-076
- Australia. Department of Primary Industry. Bureau of Animal Health, EPI-AU-037
- Australian National Animal Disease Information System, EPI-AU-037
- AVMDP, LAB-US-076
- AVP Update, BIB-US-035
- BAI, LAB-US-095
- Battelle Columbus Laboratories, LAB-US-086
- B.E.M. Rage, EPI-FR-042
- Bibliography of Agriculture*, BIB-US-016
- Biochemistry Abstracts*, BIB-UK-011
- Biological Abstracts*, BIB-US-019
- Biological Information Service, BIB-US-026
- Biomedicina Slovenica*, BIB-YU-036
- Bioresearch Today*, BIB-US-019
- Biosciences Information Service, BIB-US-019
- BIOSIS, BIB-US-019
- BIOSIS Previews*, BIB-US-019
- BRS, BIB-US-027, BIB-US-032, RES-US-109, RES-US-113
- Brucellosis Subfile, BIB-US-016, BIB-US-022
- Bulletin Epidemiologique Mensuel sur la Rage en France*, EPI-FR-042
- CA, BIB-US-020
- CAB Abstracts, BIB-UK-008, BIB-UK-009, BIB-UK-010, BIB-UK-012, BIB-UK-013, BIB-UK-015, EPI-UK-049
- CA Biochemistry Sections*, BIB-US-020
- CAHL, LAB-US-103
- Calcified Tissue Abstracts*, BIB-UK-011
- Cambridge Scientific Abstracts, RES-US-019
- CANCERGRAMS*, RES-US-111
- CANCERLINE, RES-US-111
- CANCERNET, BIB-FR-001
- CANCERPROJ, RES-US-111
- CA Search, BIB-US-020
- CA Selects*, BIB-US-020
- CAS Registry Numbers, BIB-US-017, BIB-US-020, BIB-US-023, BIB-US-024, BIB-US-030, BIB-US-033, BIB-US-034, LAB-US-088
- Centre National d'Informations Toxicologiques Veterinaires, LAB-FR-071
- Chemical Abstracts*, BIB-US-020
- Chemical Abstracts Service, BIB-US-020
- CHEMLINE, BIB-US-034
- Chemoreception Abstracts*, BIB-UK-011
- C.I.H. Keys to the Nematode Parasites of Vertebrates*, BIB-UK-009
- CLINPROT, RES-US-111
- Clinton Pathology Unit, LAB-US-079
- C.N.I.T.V., LAB-FR-071
- Colombia. Biblioteca Agropecuaria, EPI-CO-039
- Colombia. Oficina de Programacion del Sector Agropecuario, EPI-CO-039
- Colorado State University, LAB-US-076
- Commission of the European Communities. Directorate-General for Scientific and Technical Information, EPI-UK-049
- Commonwealth Agricultural Bureaux, BIB-UK-008, BIB-UK-009, BIB-UK-010, BIB-UK-012, BIB-UK-013, BIB-UK-015, EPI-UK-049
- Commonwealth Bureau of Animal Health, BIB-UK-010, BIB-UK-015, EPI-UK-049
- Commonwealth Bureau of Dairy Science and Technology, BIB-UK-008

- Commonwealth Institute of Entomology, BIB-UK-013
- Commonwealth Institute of Helminthology, BIB-UK-009, BIB-UK-012
- Compilation of Clinical Protocol Summaries*, RES-US-111
- Compton System for Recording Events Affecting Economically-Important Livestock, LAB-UK-075
- Conference Papers Index*, RES-US-109
- Conservation Library, BIB-US-028
- Consiglio Nazionale delle Ricerche, BIB-IT-003
- Continuous Eco-Pathological Survey in Supervised Ruminant Herds, EPI-FR-043
- Cook College, LAB-US-098
- Cornell University, LAB-US-091
- COSREEL, LAB-UK-075
- CPI, RES-US-109
- CRIS, RES-US-110
- Current Contents*, BIB-US-032
- Current Literature Alerting Search Service*, BIB-US-019
- Current Primate References*, BIB-US-029
- Current Programs*, RES-US-109
- Current Research Information System, RES-US-110
- Dairy Herd Health and Management Program, LAB-AU-068
- Dairy Information System, EPI-UK-050
- Dairy Science Abstracts*, BIB-UK-008
- DAISY, EPI-UK-050
- Danish Veterinary Services, EPI-DK-040
- Defense Pest Management Information Analysis Center, BIB-US-021
- Denmark. Veterinaerdirektoratet, EPI-DK-040
- Denver Public Library, BIB-US-028
- Derwent Publications, BIB-UK-014
- DIALOG, BIB-NL-004, BIB-UK-008, BIB-UK-010, BIB-UK-011, BIB-UK-013, BIB-US-027, BIB-US-032, RES-US-109, RES-US-110, RES-US-113
- DIANE, BIB-NL-004
- DIMDI, BIB-UK-008, BIB-UK-010
- Directory of Cancer Research Information Sources*, RES-US-111
- DIVET, BIB-PT-006
- Divisao de Documentacao e Informacao Cientifica e Tecnica, BIB-PT-006
- DPMIAC, BIB-US-021
- DSA, BIB-UK-008
- D.V.I., RES-UK-108
- Ecole Nationale Veterinaire de Lyon, LAB-FR-071
- Ecology Abstracts*, BIB-FR-011
- Ecuador. Ministerio de Agricultura y Ganaderia. Programa Nacional Salud Animal, EPI-EC-041
- Edvard Kardelj's University of Ljubljana. Biotechnical Faculty. Indok Service, BIB-YU-036
- Edvard Kardelj's University of Ljubljana. School of Veterinary Science, BIB-YU-036
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- Excerpta Medica*, BIB-NL-004
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- Fish Pathology Data Bank, LAB-US-081
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- Florida. Department of Agriculture and Consumer Services. Bureau of Diagnostic Laboratories, LAB-US-082
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- Illinois. Department of Agriculture, LAB-US-078
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- IMVS, LAB-AU-069
- Index to Scientific and Technical Proceedings*, BIB-US-032
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- Index Veterinarius*, BIB-UK-010, BIB-UK-015
- Information Retrieval, Limited, BIB-UK-011
- Information System for Vesicular Disease Surveillance, EPI-BR-038
- Institute for Research on Animal Diseases, LAB-UK-075
- Institute for Scientific Information, BIB-US-032
- Institute of Medical and Veterinary Science, LAB-AU-069
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- Institut Superieur d'Agriculture Rhone-Alpes. Centre Informatique, LAB-FR-071
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- International Index of Laboratory Animals*, RES-UK-106
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- International Species Inventory System, LAB-US-084
- Inventory of Agricultural Research*, RES-US-110
- Iowa. Department of Agriculture, LAB-US-085
- Iowa State-Federal Animal Health Laboratory, LAB-US-085
- Iowa State University, LAB-US-076
- IRL Life Sciences Collection, BIB-UK-011
- IRS, BIB-UK-008, BIB-UK-010, RES-US-109
- ISIS, LAB-US-084

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- Julie Moore and Associates, BIB-US-026
- Kansas State University, LAB-US-076
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- Korea Animal Health Division, EPI-KR-047
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- Laboratory Animal Data Bank, LAB-US-086
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- LABTESTS — Animal Health Laboratory Recording System, LAB-AU-070
- LADB, LAB-US-086
- Landsradet for Husdyrkontrollen, LAB-NO-074
- L.I.S., LAB-NZ-073
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- Livestock Conservation Institute, EPI-US-064
- Louisiana State University, LAB-US-076
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- Market Investigations, RES-UK-107, RES-UK-108
- Massachusetts Large Animal Diagnostic Laboratory, LAB-US-087
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- Medical Research Council (United Kingdom), RES-UK-106
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- MEDLARS, BIB-US-030, BIB-US-033, BIB-US-034, RES-US-111
- MeSH*, BIB-US-033
- MFADRS, EPI-US-056
- Michigan Animal Disease-Toxic Substance Information System, LAB-US-088
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- Michigan State University, LAB-US-076
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- Minnesota. Livestock Sanitary Board, EPI-US-056
- Minnesota Zoological Garden, LAB-US-084
- Mississippi Board of Animal Health and Veterinary Diagnostic Laboratory, EPI-US-057
- Mississippi Extension Wildlife and Fisheries, LAB-US-089
- Mississippi State University, LAB-US-076, LAB-US-089
- Montana. Department of Livestock, LAB-US-090
- Montana Veterinary Diagnostic Laboratory, LAB-US-090
- MPRSYY80, EPI-US-054
- National Agricultural Library, BIB-US-016
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- National Institutes of Health, BIB-US-030, BIB-US-033, BIB-US-034
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- National Library of Medicine, BIB-US-030, BIB-US-034, LAB-US-086
- National Library of Medicine. Toxicology Information Program, BIB-US-033
- National SPF Swine Accrediting Agency, EPI-US-059
- National Technical Information Service, BIB-US-027, RES-US-113
- National Toxicology Program, BIB-US-017, BIB-US-023, BIB-US-024
- National Veterinary Index, RES-UK-107
- National Wildlife Health Laboratory, EPI-US-058
- Nebraska SPF Swine Accrediting Agency, EPI-US-059
- Nederlandse Veterinaire Index, RES-UK-108
- Nevada Animal Disease Laboratory, EPI-US-060
- Nevada. Department of Agriculture. Animal Disease Laboratory, EPI-US-060
- New Jersey. Division of Fish, Game, and Wildlife. Clinton Pathology Unit, LAB-US-079
- New Mexico Brucellosis Computer System, EPI-US-061
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- New York Fish Disease Control Center, LAB-US-092
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- New York (State). Department of Agriculture and Markets. Division of Animal Industry, LAB-US-091
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- NWHL, EPI-US-058
- Oak Ridge National Laboratory, BIB-US-017, BIB-US-023, BIB-US-024
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- Ohio State University, LAB-US-076
- Oklahoma. State Department of Agriculture. Animal Industry Division, EPI-US-062
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- ORBIT, BIB-UK-008, BIB-UK-010, BIB-UK-013, BIB-US-027, RES-US-109, RES-US-113
- Oregon Regional Primate Research Center, LAB-US-096
- Oregon State University. Veterinary Diagnostic Laboratory, LAB-US-094
- Oregon Veterinary Diagnostic Laboratory, LAB-US-094
- Pan American Foot-and-Mouth Disease Center, EPI-BR-038, EPI-CO-039, EPI-EC-041
- Pan American Health Organization, EPI-BR-038
- PEARLS Information System, EPI-UK-050
- Pennsylvania Bureau of Animal Industry, LAB-US-095
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- Primate Information Center, BIB-US-029

- Primate Information Management System, LAB-US-096
- PRIME, LAB-US-096
- Programa Nacional Salud Animal. Department of Epidemiology, EPI-EC-041
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- Purdue University, LAB-US-076
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- QUEST, BIB-UK-013
- RAE(B), BIB-UK-013
- RECON, BIB-US-023, BIB-US-024
- Regional Primate Research Center, BIB-US-029
- Registry of Toxic Effects of Chemical Substances Online, BIB-US-030
- Registry of Veterinary Pathology, LAB-US-097
- Research Council of Slovenia, BIB-YU-036
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- Rutgers Poultry Health Laboratory, LAB-US-098
- SALVET, EPI-GE-044
- Schweizerische Tollwutzentrale (Swiss Rabies Center), EPI-SZ-048
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- Science Citation Index*, BIB-US-032
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- Smithsonian Institution, RES-US-113
- Smithsonian Science Information Exchange, RES-US-110, RES-US-113
- South Australia. Health Commission, LAB-AU-069
- SSIE, RES-US-113
- Standard Nomenclature of Veterinary Diseases and Operations*, LAB-AU-067, LAB-US-076, LAB-US-091, LAB-US-100, LAB-US-101, LAB-US-104
- State Agricultural Experiment Stations, RES-US-110
- State Federal Cooperative Laboratory, EPI-US-061
- Swine T.B. Fax, EPI-US-064
- Swiss Rabies Center, EPI-SZ-048
- Switzerland. Eidgenoessisches Veterinaeramt, EPI-SZ-048
- TDB, BIB-US-033
- Tennessee Veterinary Medical Information Science, LAB-US-099
- Texas A and M University, LAB-US-076
- Texas Veterinary Medical Diagnostic Laboratory, EPI-US-065
- Texas Veterinary Medical Diagnostic Laboratory Statistical Report*, EPI-US-065
- Thesaurus of Sport Fish and Wildlife Descriptors*, BIB-US-026
- TIIS (Toxicology Information and Investigation Service), LAB-US-078
- Toxicology Abstracts*, BIB-UK-011
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- United States. Department of Agriculture. Science and Education Administration. Technical Information Systems, BIB-US-016, RES-US-110
- United States. Department of Commerce, BIB-US-027
- United States. Department of Energy, BIB-US-017, BIB-US-023, BIB-US-024
- United States. Environmental Protection Agency, RES-US-112
- United States. Fish and Wildlife Service, BIB-US-028, EPI-US-058
- United States. Fish and Wildlife Service. Fish Disease Control Center, LAB-US-080
- Universal Decimal Classification, BIB-US-025, BIB-YU-036, EPI-BR-038
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- Universitaet Bern. Vet.-Bakteriologisches Institut, EPI-SZ-048
- University of California, Davis, LAB-US-076
- University of Florida. College of Veterinary Medicine, LAB-US-100
- University of Florida Veterinary Clinical Data Retrieval System, LAB-US-100
- University of Georgia, LAB-US-076, LAB-US-083
- University of Guelph, LAB-US-076
- University of Illinois, LAB-US-076
- University of Illinois. College of Veterinary Medicine, LAB-US-078
- University of Massachusetts, LAB-US-087
- University of Melbourne. Veterinary Clinical Centre, LAB-AU-068
- University of Minnesota, LAB-US-076
- University of Missouri, LAB-US-076
- University of Reading. Department of Agriculture and Horticulture. Veterinary Epidemiology and Economics Research Unit, EPI-UK-050
- University of Saskatchewan, LAB-US-076
- University of Tennessee, LAB-US-076
- University of Tennessee. College of Veterinary Medicine, LAB-US-099
- University of Tennessee. Veterinary Teaching Hospital, LAB-US-099
- University of Vermont. Department of Animal Pathology, LAB-US-102
- University of Washington, BIB-US-029
- Update*, BIB-US-035
- Utah State University. Veterinary Diagnostic Laboratory, LAB-US-101
- Utah State Veterinary Diagnostic Laboratory Case File, LAB-US-101
- VDIL, LAB-US-083
- Vermont. Department of Agriculture, EPI-US-066
- Vermont State Diagnostic Lab, LAB-US-102
- VETDOC, BIB-UK-014
- Veterinary Bulletin*, BIB-UK-015
- Veterinary Investigation Diagnosis Analysis II, EPI-UK-051
- Veterinary Multilingual Thesaurus*, BIB-IT-003, BIB-PT-006
- Veterinary Reference Service, BIB-US-035
- Veterinary Research Department, LAB-KE-072
- Victoria. Department of Agriculture, LAB-AU-068
- VIDA II, EPI-UK-051

VIRDB, EPI-GE-045

Virus Data Bank, EPI-GE-045

V.M.I.S., LAB-US-099

V.R.D. Muguga, LAB-KE-072

Western Australia. Department of Agriculture. Animal Health
Laboratory, LAB-AU-070

Wisconsin Central Animal Health Laboratory, LAB-US-103

Wisconsin. Department of Agriculture, Trade, and Consumer Pro-
tection, LAB-US-103

Wiswesser Line Notation, BIB-US-030, BIB-US-033

World Health Organization, EPI-GE-045, EPI-IT-046, EPI-UK-049

World Health Organization. Collaborating Centre, EPI-GE-045

Zoological Society of San Diego, LAB-US-104

Zoonoses Order Data, EPI-UK-052



